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Socioeconomic Characteristics of Medical Practice

Contains results from the
Socioeconomic Monitoring System
1991 Spring Survey

Center for Health Policy Research

American Medical Association
Physicians dedicated to the health of America

Socioeconomic Characteristics of Medical Practice 1992

Edited by
Martin L. Gonzalez

Center for Health Policy Research

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Foreword

Changes in the health care environment have occurred rapidly in recent years. A significant recent change is the development and 1992 implementation of a Medicare Fee Schedule that will determine a physician's reimbursement from Medicare.

The Center for Health Policy Research has attempted to follow the impact of changes, such as the Medicare Fee Schedule, by tracking key indicators of physician practice over time. The results of these efforts have been made available to the public in *Socioeconomic Characteristics of Medical Practice*. This edition highlights information from the American Medical Association's Socioeconomic Monitoring System 1991 core survey. Information provided in this edition will serve as a baseline measure of physician practice characteristics prior to the implementation of the Medicare Fee Schedule.

Two new articles are included in this edition. The first article analyzes measures of access to care by Medicare patients. The second compares Medicare and private third-party reimbursements. Updates of articles, published in past editions, highlighting medical professional liability and physician income trends are also included. The articles are followed by detailed tabulations of statistics on a broad range of physicians' practice characteristics, including income, expenses, fees, and a number of specific practice activities. In addition, trend information is provided so that the reader can examine how these characteristics have changed over time.

Changes in the detailed tabulations have been made in this edition. First, where applicable, a breakout for the specialty pathology has been included in the trend tables. Expense component information will also be presented for radiology, psychiatry, anesthesiology and pathology. In addition, the employment status and age breakouts have been expanded. The employment status category now includes independent contractors. Previously, independent contractors have been included in the employee category. A new category "non-self-employed physicians" includes both independent contractors and employees. This category is equivalent to the "employee" category published in previous editions. The age category has been expanded to include an under age 40 category.

Expense components are now presented within specialty by census division, practice type, practice location, and physician age. In previous editions the components were only presented in the trends tables.

The introduction will assist readers in interpreting the book's information. It provides definitions for the statistical terms used and gives examples of how best to utilize the information presented in the tables. Users are encouraged to avail themselves of the information in the introduction and the appendices when interpreting the reported findings.

A program of the magnitude of the Socioeconomic Monitoring System (SMS) requires major commitment and substantial effort from many individuals. I would like to express my gratitude to all who have contributed to SMS and this edition of *Socioeconomic Characteristics of Medical Practice*. Special thanks are due James W. Moser, PhD, director of the Office of Socioeconomic Research Information, who had major responsibility for oversight of this publication.

James F. Rodgers, PhD
Director
Center for Health Policy Research

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Introduction: How to Use Socioeconomic Characteristics of Medical Practice

Socioeconomic Characteristics of Medical Practice is an annual volume with studies and statistics based on information collected by the AMA Socioeconomic Monitoring System (SMS). This volume maintains the tradition of the AMA, established in the past by the series *Profile of Medical Practice*, as a primary source of baseline data on socioeconomic aspects of medicine.

This volume is primarily devoted to providing detailed information on medical practice characteristics in 1990 and 1991 based on data collected with the 1991 SMS core survey. However, selected trends are shown for characteristics for which similar data were collected in the past on earlier SMS surveys.

The information in this volume is intended for use by a variety of individuals who come into contact with medical practice issues from different perspectives. Physicians might use this information in assessing the likely impact of such practice changes as relocating or joining a group practice on their earnings, patient volume, and practice costs. Medical practice consultants may use this information to improve their ability to assess a client's performance and suggest areas for improvement. Hospital administrators may find the volume useful in determining appropriate compensation levels and hours for their medical staff.

Definition of Statistics

A statistic is simply a summary measure based on survey results to describe an attribute of the distribution of a characteristic across a population; in this instance a population of physicians. This volume provides a mean and standard error for each characteristic presented in the tables. Median net income and expense figures are also presented, as are figures for net income at the 25th and 75th percentiles.

Although the mean and median are more commonly employed statistics, the information on the 25th and 75th percentiles of each characteristic is included to emphasize how characteristics vary across groups within the physician population. In some instances, the information on the 25th and 75th percentiles might be more typical of the experience of subgroups of physicians than either the mean or median.

It must be kept in mind that the statistics presented are only estimates of population characteristics derived from surveying a sample of physicians. This may cause characteristics of the full physician population to differ from information obtained from SMS survey results. For this reason, the results include measures that should be considered carefully in judging what degree of confidence to attribute to any inferences drawn from the SMS results.

This is especially true of the within-specialty breakdowns by census division (e.g., net income for surgeons in the New England Census Division), which appear in tables that present current year information only. These figures are often calculated with a small number of observations, although figures calculated with less than 20 observations are not printed. Small sample sizes often cause the figures to fluctuate from year to year—more from sampling error than from actual changes in the characteristic. Hence, the user should be cautious when extrapolating trends from this information. The standard error of the mean, which is defined below, should be used to determine if year-to-year changes in these figures are statistically significant. The statistics presented for each characteristic and a brief discussion of how each may be used follows.

Mean (or Average)

The sample mean is an estimate of the average value of a characteristic for a given population. The mean is often referred to as a measure of "central tendency" for a characteristic because it tends to be located in the middle of the distribution of all possible values for the characteristic. However, it may neither be the most common nor a very typical value. For example, for many physician characteristics, a large share of physicians are concentrated in a range of lower possible values for the characteristic while a small share of physicians have extremely high values. An example of this type of characteristic is physician net income after expenses before taxes. For such characteristics, the mean will exceed the most common value and the values representative of the experience of typical physicians. In these instances, the median (as discussed below) may be a more appropriate measure to use for making some types of inferences.

If information were available on a characteristic from the entire population of physicians in a group, the mean would be computed as the sum of the values of the characteristic across the group divided by the number in that group. This approach would also be followed using sample information to obtain an estimate of the mean if the sample were perfectly representative of the entire group. However, an examination of SMS survey results indicates that, although the initial samples are representative of the underlying physician population, some physician groups are underrepresented and others overrepresented among those physicians who complete the survey. To alleviate the biases that would arise from this result, the estimates of the mean reported in this volume are weighted averages of survey responses. The weights give greater importance to information reported by groups of physicians who are underrepresented in the final survey sample in the calculation of the mean. The "weighted" mean provides a more accurate reflection of the population mean. A further discussion of the weighting procedure and computation methods appears in Appendix B.

Standard Error of the Mean

The standard error is used in assessing the reliability of the estimate of the mean based on sample information in drawing conclusions about the mean of a characteristic for the underlying population. Larger standard errors indicate that the sample mean is subject to greater possible error as a representation of the mean for the entire population.

Two factors directly affect the standard error. First, the standard error diminishes as the number of respondents increases. Second, the standard error will tend to be greater for characteristics with greater dispersion in the values in the population. This is because greater dispersion increases the chance that a single unusual value will be reflected in the sample information (sometimes called an "outlier"), which will have inordinate influence in the calculation of the mean. However, as the overall sample increases, the influence of any single response will diminish, so that outlier problems that may introduce error into the estimates of the means will diminish.

A common use of standard error estimates is in the construction of confidence intervals. Confidence intervals are used for making statements about the probability with which the mean for the population of a physician group falls within certain bounds. For a 95% confidence interval, the bounds are given by the mean estimate plus 1.96 times the standard error and the mean estimate minus 1.96 times the standard error. The mean for the population will fall within these bounds with a probability of 95%. For a 90% confidence interval, the bounds are given by the mean estimate plus and minus 1.64 times the standard error.

For example, the sample mean number of office visits per week per physician in 1991 was 79.2 and the standard error was approximately 1.1. This indicates that there was a 90% probability that the population mean was between 77.4 and 81.0 and a 95% probability that the population mean was between 77.0 and 81.4.

25th Percentile

The 25th percentile is the value of the characteristic larger than that experienced by 25% of a specified group and exceeded by the remaining three-fourths of that group.

Median (or 50th Percentile)

The 50th percentile is the value of the characteristic larger than that experienced by half of a group, but smaller or equal to that experienced by the other half. This is a measure of central tendency often

used as an alternative to the mean because it provides a better representation of the typical experience of individuals in the population group. It is also less subject to the influence of outliers than the mean.

75th Percentile

This is the value of the characteristic larger than that occurring for 75% of the physician group, but equal to or exceeding that for the other 25%.

A series of appendices relating to the methodology of the SMS surveys, the SMS questionnaire, and definitions of variables reported in the tables are included at the end of the book. These appendices are designed to answer most questions about how information included in this volume is generated. We urge readers to avail themselves of this information in considering the results published elsewhere in the volume.

Studies on the Socioeconomic Environment of Medicine

Monitoring Medicare Access
by David W. Lee, Kurt D. Gillis, and Philip R. Kletke

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Monitoring Medicare Access

by David W. Lee, Kurt D. Gillis, and Philip R. Kletke

Introduction

Before 1992, Medicare's payments for physician services were based on the physician's customary, prevailing or reasonable charge. Beginning in January of 1992, this reimbursement system was replaced with a fee schedule based on a relative value scale for procedures, and limits were placed on the ability of physicians to charge patients above the fee schedule amount (OBRA 1989). These changes in payment policy are expected to increase reimbursements for primary care services while reducing payments for surgical and other non-primary care services (*Federal Register* 1991). In addition, geographic adjustments incorporated in the new fee schedule are projected to boost average payment levels in rural localities while reducing average payment amounts in urban areas (Physician Payment Review Commission 1990).

It is unclear whether or how these changes in payment policy will affect Medicare beneficiaries' access to care. For instance, it is reasonable to suggest that access in rural areas and access to primary-care services may improve as a result of these payment reforms. Conversely, changes in access to care in areas where payments have been reduced or for services experiencing reimbursement reductions is a matter of concern among policymakers. Accordingly, official access-monitoring activities are required as part of the physician payment reform legislation.[1]

In the sections below, several new indicators of Medicare access that augment existing Medicare access statistics (Gillis *et al.*, forthcoming) are presented. These include:

- the number of physicians treating Medicare patients;
- physicians' willingness to accept new Medicare patients;
- Medicare beneficiaries' utilization of visits and surgical procedures relative to the non-Medicare population; and
- the concentration of visits and surgical procedures among physician-providers of Medicare services.

These access measures are calculated to provide a benchmark for evaluating the access consequences of physician payment reform.

Data Sources

The data used to construct these access measures are drawn primarily from the 1987-1991 core surveys of the American Medical Association's Socioeconomic Monitoring System (SMS). Respon-

1. The legislation implementing payment reform (OBRA 1989) requires that the Secretary of Health and Human Services provide Congress with an annual report detailing changes in access to care for Medicare beneficiaries. The legislation also requires the Physician Payment Review Commission to review and comment on the Secretary's report.

David W. Lee and Kurt D. Gillis are economists and Philip R. Kletke is Senior Social Scientist in the AMA Center for Health Policy Research.

Table 1: **Physicians Treating Medicare Patients per 100,000 Enrollees**

	1987	1988	1989[a]	1990[a]	1991[b]	Annual Rate of Change 1987-1991
All Physicians	99.67	102.65	104.22	105.62	108.56	2.16%
By Specialty						
General/Family Practice	16.94	17.36	17.33	17.37	17.68	1.08%
General Internal Medicine	13.89	14.46	14.46	14.68	15.29	2.44%
Medical Subspecialties	9.91	10.39	10.80	11.19	11.65	4.14%
Surgery	29.97	30.53	30.74	30.64	31.07	0.90%
General Surgery	6.62	6.56	6.67	6.48	6.51	-0.43%
Ophthalmology	3.93	3.95	4.03	4.04	4.13	1.22%
Orthopedic Surgery	4.36	4.44	4.52	4.34	4.50	0.76%
Radiology, Anesthesiology, and Pathology	14.28	14.68	14.82	15.37	15.94	2.78%
Other Specialties	14.76	15.21	16.03	16.37	16.90	3.45%
By Location						
Nonmetropolitan						
Less than 25,000	32.13	32.88	33.40	32.08	32.53	0.32%
25,000 or more	61.27	62.89	63.33	63.59	64.06	1.12%
Metropolitan						
Less than 250,000	98.77	101.01	104.01	104.55	106.77	1.97%
250,000–1,000,000	101.70	105.95	107.67	108.95	111.57	2.34%
1,000,000 or more	131.42	134.86	136.18	139.12	144.08	2.33%

Source: See text of article.
a. Based on estimated Medicare enrollment data.
b. Based on estimated Medicare enrollment and physician supply data.

dents to the SMS survey are limited to non-federal patient-care physicians (excluding residents), and are weighted to adjust for nonresponse bias. For a detailed discussion of the SMS survey see appendices in *Socioeconomic Characteristics of Medical Practice 1992*. Pediatricians are excluded from this analysis.

Data on the total population, the number of Medicare enrollees, and physician supply were also used in the analysis. The enrollee and population data were obtained from the Area Resource File, while figures on physician population were taken from the American Medical Association's Physician Masterfile. Because enrollee and population data were available only through 1988, estimates for 1989-1991 were obtained by projecting the 1984-1988 trends in total enrollees and total population, and the trends in the distribution of these variables across geographic area. A similar process was used to project 1991 physician supply data from 1987-1990 data.

Physicians Treating Medicare Patients

One elementary measure of access is the availability of physicians willing to treat Medicare patients relative to the enrollee population. This can be estimated by the physician-enrollee ratio weighted by the proportion of physicians treating Medicare patients, (i.e., the physician population multiplied by the proportion of physicians that treat Medicare patients and then divided by the number of Medicare enrollees).

As shown in Table 1, the estimated number of physicians treating Medicare patients per 100,000 Medicare enrollees increased at an annual rate of 2.16% overall between 1987 and 1991, suggesting an improvement in Medicare access over the five-year span. However, changes in the availability of physicians relative to Medicare beneficiaries varied by specialty and location. For example, increases were largest among medical subspecialists and "other specialists," (see Appendix D of *Socioeco-*

Table 2: **Decomposition of Growth Rates**

	Total*	Physician Population	Proportion of Physicians Treating Medicare Patients	Enrollees
All Physicians	2.16%	3.38%	0.49%	1.69%
By Specialty				
General/Family Practice	1.08%	2.34%	0.43%	1.69%
General Internal Medicine	2.44%	3.92%	0.24%	1.69%
Medical Subspecialties	4.14%	4.90%	0.95%	1.69%
Surgery	0.90%	2.47%	0.13%	1.69%
General Surgery	-0.43%	1.01%	0.24%	1.69%
Ophthalmology	1.22%	2.59%	0.33%	1.69%
Orthopedic Surgery	0.76%	3.14%	-0.65%	1.69%
Radiology, Anesthesiology, and Pathology	2.78%	4.24%	0.27%	1.69%
Other Specialties	3.45%	3.93%	1.22%	1.69%
By Location				
Nonmetropolitan				
Less than 25,000	0.32%	0.59%	0.44%	0.71%
25,000 or more	1.12%	2.42%	0.47%	1.76%
Metropolitan				
Less than 250,000	1.97%	3.76%	0.46%	2.23%
250,000–1,000,000	2.34%	3.93%	0.58%	2.14%
1,000,000 or more	2.33%	3.35%	0.47%	1.47%

Source: See text of article.

* The total growth rate is approximately equal to the growth rate of physician supply plus the growth rate in the proportion of physicians treating Medicare patients minus the growth rate of the enrollee population.

nomic Characteristics of Medical Practice 1992 for definition of this specialty category) while the estimated number of general surgeons treating Medicare patients per enrollee actually fell by 0.43% annually. Gains in physician availability were also registered across all geographic areas, although increases in metropolitan areas were substantially greater than those experienced in nonmetropolitan areas.

To understand better the forces behind these changes, Table 2 presents the 1987-1991 annual growth rates for each of the components used to construct Table 1. By examining this decomposition of growth rates, it becomes apparent that an increasing supply of physicians is the primary factor driving the increased number of physicians treating Medicare patients per Medicare enrollee. The supply of physicians grew twice as fast as the number of enrollees between 1987 and 1991, while the estimated proportion of physicians treating Medicare patients increased at a modest rate of 0.49% per year.

In two cases, however, the number of enrollees actually grew faster than the supply of physicians. The first involves general surgeons, whose population grew at an annual rate of only 1.01% between 1987 and 1991 compared to a growth rate of 1.69% for enrollees. This resulted in a reduction in the number of general surgeons treating Medicare patients per enrollee even though the proportion of general surgeons treating Medicare patients increased by 0.24% annually. The second case is that of rural counties with populations less than 25,000. In these areas, the estimated number of physicians willing to treat Medicare patients per enrollee actually grew by 0.32% annually despite the fact that enrollee growth exceeded growth in physician supply. Here, the 0.44% annual increase in the proportion of physicians treating Medicare patients was more than sufficient to offset the reduced number of physicians per enrollee.

Table 3: **Physicians' Willingness to Accept New Medicare Patients**

Acceptance of new Medicare patients	Percent of Physicians by Year* 1990	1991
All new Medicare patients accepted	80.0%	79.2%
Some accepted	13.5	14.4
Accepted by *referral* only	2.3	2.4
None accepted and		
new non-Medicare patients not accepted by practice	1.1	1.5
new non-Medicare patients accepted by practice	3.1	2.5
Total	100.0%	100.0%
Sample size	2734	2718

Source: see text of article.
* Excludes pediatricians, radiologists, anesthesiologists, pathologists and emergency medicine physicians. Also excludes physicians that did not treat Medicare patients.

Table 4: **Percent of Physicians Accepting No New Medicare Patients, by Specialty and Location***

	1990	1991
All Physicians	4.2%	4.0%
By Specialty		
General/Family Practice	8.4	9.2
General Internal Medicine	6.0	5.5
Medical Subspecialties	1.4	0.3
Surgery	1.7	1.0
General Surgery	0.3	1.6
Ophthalmology	1.6	0.0
Orthopedic Surgery	0.0	1.4
Other Specialties	6.3	5.7
By Location		
Nonmetropolitan		
Less than 25,000	2.8	4.5
25,000 or more	7.1	4.1
Metropolitan		
Less than 250,000	4.4	4.8
250,000–1,000,000	4.8	4.7
1,000,000 or more	3.7	3.4
Sample size	2741	2720

Source: See text of article.
* Excludes pediatricians, radiologists, anesthesiologists, pathologists and emergency medicine physicians. Also excludes physicians that did not treat Medicare patients.

Physicians Accepting New Medicare Patients

Perhaps the most sensitive indicator of changes in access is physicians' willingness to accept new Medicare patients.[2] Ties with established patients may be difficult to break due to ethical considerations, particularly for primary care physicians. Thus, changes in Medicare payment policy are more likely to affect beneficiaries attempting to obtain new sources of care than those with established relationship with physicians.

Beginning in 1990, physicians who treated Medicare patients were asked whether they accepted all, some, or no new Medicare patients or whether they accepted new Medicare patients by referral only.[3] The responses for 1990 and 1991 are summarized in Table 3. Approximately 80% of physicians sampled accepted all new Medicare patients in both 1990 and 1991. Some new Medicare patients were accepted by 14.4% of physicians in 1991, up slightly from 13.5% in 1990. A small minority of physicians accepted new Medicare patients by referral only (2.4% in 1991) or not at all (4.2% in 1990 and 4.0% in 1991). The slight change in the distribution of responses observed between 1990 and 1991 was not statistically significant. Among those who did not accept new Medicare patients, it is useful to consider whether these physicians' practices accepted new non-Medicare patients. As Table 3 shows, more than half of those who did not accept new Medicare patients were willing to accept other patients to their practices in both 1990 and 1991.[4]

Data on the percentage of physicians that did not accept new Medicare patients are further broken out by specialty and location in Table 4. The tendency not to accept new Medicare patients differed

2 Acceptance of new Medicare patients described in this section should not be confused with the decision of the physician to accept assignment on services to Medicare patients. The concern here is only with the decision of whether to treat new Medicare patients regardless of the mode of payment.
3 Pediatricians, radiologists, anesthesiologists, pathologists and emergency medicine physicians were not asked this question.
4 These figures should be interpreted with some caution, given that the question on the acceptance of new Medicare patients relates only to the physician, whereas the question on the acceptance of any new patients relates to the physician's practice.

Table 5: **Relative Medicare Visits**

	1987	1988	1989[a]	1990[a]	1991[b]
All Physicians	3.82	3.72	3.93	3.97	3.87
By Specialty					
General/Family Practice	3.25	3.66	3.74	3.64	3.37
General Internal Medicine	6.67	6.40	6.53	6.15	6.26
Medical Subspecialties	6.93	5.55	6.38	7.91	6.41
Surgery	2.92	2.78	2.92	3.12	3.17
General Surgery	4.17	4.43	4.23	4.67	5.28
Ophthalmology	6.98	6.27	7.82	7.45	7.78
Orthopedic Surgery	2.81	2.45	2.74	3.09	2.83
Other Specialties	2.64	2.37	2.62	2.53	2.52
By Location					
Metropolitan					
Less than 25,000	4.09	3.95	4.44	3.82	3.65
25,000 or more	3.61	3.72	3.73	4.11	3.54
Metropolitan					
Less than 250,000	3.39	3.43	3.67	3.89	4.02
250,000–1,000,000	3.97	3.93	4.20	3.93	3.80
1,000,000 or more	3.95	3.68	3.84	4.05	4.12

Source: See text of article.
a. Based on estimated Medicare enrollment data.
b. Based on estimated Medicare enrollment and physician supply data.

significantly by specialty. On average, general/family practitioners, general internists and "other specialists" were more likely to reject new Medicare patients than other physicians. This may reflect the fact that primary care physicians generally commit to a longer term relationship when accepting new patients than those providing more specialized care, and may thus be more reluctant to accept new patients.

Across locations, differences in the tendency not to accept new Medicare patients were marginally significant in 1990 (chi-square statistic significant at the 10% level). Physicians surveyed by SMS in the most rural locations were the least likely to turn down new Medicare patients in 1990. In 1991, locational differences were insignificant for this measure and the rate in the most rural locations rose above the overall rate. Given the disproportionate representation of primary care physicians in rural areas, however, the specialty-adjusted rate of not accepting new Medicare patients would probably be lower for rural areas than Table 4 suggests.

Relative Utilization of Services—Medicare Visits and Operations

Access to care can also be monitored by tracking Medicare beneficiaries' utilization of various physician services. Two broad categories of physician services—visits and operations— are examined. Counts of services for both Medicare and non-Medicare patients may be influenced by general changes in practice patterns, the coding of services (e.g., bundling of services) and other general trends. Therefore, measures of Medicare utilization are presented as relative measures (i.e., the average rate of use of these services for Medicare patients relative to non-Medicare patients). These measures will capture changes in access for Medicare beneficiaries relative to that of the non-Medicare population. The first measure of utilization includes visits in all locations: physician offices, emergency rooms or outpatient clinics, hospital rounds and other locations. The second measure includes all surgical procedures performed, including deliveries, but it excludes assists.

Table 6: **Relative Medicare Operations**

	1987	1988	1989[a]	1990[a]	1991[b]
All Physicians	3.21	3.09	3.00	3.22	3.76
By Specialty					
General/Family Practice	1.13	1.65	1.49	0.63	0.93
General Internal Medicine	2.46	1.72	4.53	5.77	6.68
Medical Subspecialties	5.63	4.76	4.47	6.32	9.02
Surgery	3.18	3.14	3.00	3.12	3.44
General Surgery	4.20	4.81	4.00	4.59	5.38
Ophthalmology	22.93	19.11	23.05	19.89	22.08
Orthopedic Surgery	3.19	2.53	2.67	2.84	3.34
Other Specialties	6.90	3.88	2.72	3.37	4.77
By Location					
Nonmetropolitan					
less than 25,000	3.14	3.82	1.98	1.59	2.11
25,000 or more	2.79	3.16	3.19	3.39	3.21
Metropolitan					
less than 250,000	3.77	2.97	3.64	3.34	3.81
250,000–1,000,000	3.50	3.29	3.33	3.62	3.96
1,000,000 or more	3.27	3.08	2.66	3.12	4.23

Source: See text of article.
a. Based on estimated Medicare enrollment data.
b. Based on estimated Medicare enrollment and physician supply data.

Tables 5 and 6 display data on relative Medicare visits and operations, respectively, from 1987 to 1991. Relative Medicare visits are defined as the ratio of Medicare visits per enrollee to non-Medicare visits per non-Medicare individual. Relative Medicare operations are defined analogously.

Overall, Medicare enrollees have nearly four times as many visits on average as non-Medicare individuals and more than three times as many operations. Relative utilization by Medicare enrollees was above average for the services of internists and internal medicine subspecialists, and was greatest for ophthalmology services. Relative visits did not differ substantially by location. Thus, even though overall physician supply is much lower in rural areas, rural Medicare enrollees appear to have the same relative degree of access to primary care services (on average) as urban Medicare enrollees.

Both visits and operations exhibit a substantial amount of "noise," making trends more difficult to detect. In fact, no clear trends are readily apparent in visits per Medicare enrollee relative to non-enrollees. However, relative Medicare operations trended upward slightly from 1989 to 1991 across many specialties and locations. It is difficult to determine exactly what changes in relative Medicare operations represent. Increased relative utilization of invasive care may indicate improved access, or it may indicate declining access if acute care is becoming more necessary to compensate for a lack of primary care. The lack of decline in relative utilization of visits suggests that the upward trend in relative Medicare operations is indicative of improved access for the Medicare population (relative to non-Medicare patients).

The Distribution of Medicare Visits and Operations

Examining only the overall level of utilization may mask important changes in the delivery of Medicare services. Experience with the Medicaid program suggests that reduced payment rates may lead some physicians to cut back on their Medicare patient load, increasing pressure on other physicians to treat more Medicare patients. To capture these po-

Table 7: **The Distribution of Medicare Visits and Operations Across Physicians: 1987 and 1991**

Percent of Physicians (ranked by volume of service)	Medicare Visits		Medicare Operations	
	1987	1991	1987	1991
10%	0.04%	0.2%	0.0%	0.0%
20	1.3	1.8	0.0	0.0
30	4.4	5.2	0.0	0.07
40	9.3	10.4	1.1	3.4
50	16.1	17.3	6.0	9.7
60	25.0	26.3	14.3	17.4
70	36.3	37.7	25.5	27.7
80	50.7	52.0	40.7	42.0
90	69.6	70.5	61.4	62.3
100	100.0	100.0	100.0	100.0

Source: See Text of article.

tential access outcomes, Table 7 presents information on the concentration of Medicare visits and operations among physicians in the SMS sample for 1987 and 1991.

To construct Table 7 physicians were ranked by the number of Medicare visits or operations reported, from lowest to highest. The table presents cumulative percentages of Medicare visits or operations for physicians with respect to this ranking.[5] For example, the first row of Table 7 indicates that the 10% of physicians with the fewest Medicare visits provided only .04% of all Medicare visits in 1987. In contrast, the 10% of physicians with the greatest number of Medicare visits provided over 30% of all visits in the same year. The distribution of operations was even more skewed, with the bottom 30% of surgeons or medical specialists providing no Medicare operations and the top 10% (in volume) performing nearly 40% of all such procedures.

There has been a clear trend over time in the way that Medicare visits and operations are spread across providers. That is, both visits and operations have become more evenly distributed among providers.[6] Of course, changes in the distribution of Medicare services may be driven by other factors that are entirely independent of access. Increased specialization on the part of physicians may lead to greater concentration in the provision of services without any negative implications for Medicare patients' access (for example, increased specialization in geriatric medicine substituting for the services of general/family practitioners). Nevertheless, trends in the distribution of Medicare services among physicians will be important to watch as Medicare physician payment reform unfolds.

Conclusion

This paper suggests a variety of measures for monitoring Medicare enrollees' access to care, and it reports data on these indices for the 1987–91 period to provide a benchmark against which to measure future changes in Medicare enrollees' access to care. Recent trends in these measures indicate that the access of Medicare patients to physician services has not decreased in recent years and, in some respects, may have increased.

Between 1987 and 1991, the number of physicians treating Medicare patients per Medicare enrollee rose by an estimated 2.16% per year. This increase was due to the fact that growth in the total physician population has greatly surpassed growth in the number of Medicare enrollees, and that the proportion of physicians treating Medicare patients has

5 In considering the distribution of Medicare operations across physicians, the relevant sample is limited to only medical subspecialists and surgeons, because other specialties provide only a small number of these services.

6 A summary measure of the concentration of services displayed in the appendix shows that this trend has been gradual but persistent over this time frame.

Table 8: **Gini Coefficients for Medicare Visits and Operations**

Year	Visits	Operations
1987	.483	.614
1988	.478	.595
1989	.478	.608
1990	.466	.587
1991	.465	.585

Source: See text of article.

risen slightly. In general, the increases in this measure of Medicare access were highest for the medical subspecialties and for radiology, anesthesiology, and pathology—the specialties for which the physician population had the highest growth rates. Similarly, the increases in this measure of access were higher in metropolitan areas than nonmetropolitan areas, due to the relatively slow growth of the physician population in rural areas.

Currently, the great majority of physicians (almost 80%) accept all new Medicare patients who come to them. Only 4% of physicians accept no new Medicare patients, and some of these physicians accept no new patients at all, evidently because their practices are already filled to capacity. General/ family practitioners and general internists are more likely than other physicians not to accept all new Medicare patients that come to them.

It is still an open question whether the pervasive acceptance of Medicare patients will persist in those specialties for which payments will be reduced. The uncertain impact that current Medicare payment reforms will have on physicians' acceptance of Medicare patients make this issue a major policy concern. A wide variety of analyses of the Medicaid program have found that physician participation in public programs is directly affected by levels of physician reimbursement. Thus, while the findings presented here do not indicate any cause for immediate concern about a decline in Medicare patients' access to physician services, there is still a great need to monitor trends in physicians' acceptance and treatment of Medicare patients and their impact on patient access.

Appendix: Further Analysis of the Distribution of Medicare Visits and Operations.

Table 8 presents information on the distribution of Medicare visits and operations across physicians. A summary measure commonly reported for these types of distributions is the Gini coefficient, which measures the degree of concentration of the distribution of, in this case, the provision of Medicare services. The Gini coefficient is bounded between zero and one, and a smaller Gini coefficient indicates a more equal distribution of visits or operations across physicians—a potential indicator of better access to care. Table 8 reports the Gini coefficient for Medicare visits and operations from 1987 to 1991. A persistent trend downward in this measure has occurred for both visits and operations, indicating that Medicare visits and operations have become more evenly distributed across physicians over this time period.

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Medicare and Private Insurance Reimbursement for Physician Services

by Anita J. Chawla

The Medicare program implemented a payment schedule for physician services reimbursement on January 1, 1992.[1] For most Medicare Part B services, reimbursement according to a payment schedule—called the Medicare Fee Schedule—represents a departure from payment based on customary, prevailing, and reasonable charges (CPR). Under the new system, physician payment is primarily determined according to a Resource-Based Relative Value Scale (RBRVS). The payment schedule is a function of relative value units, a geographic adjustment factor, and a conversion factor that translates the relative value scale into monetary payments. Total relative value units for a service are equal to the sum of relative value units for physician work, practice expenses, and the cost of malpractice insurance.

The Physician Payment Review Commission (PPRC) has summarized a number of important policy issues associated with the development and implementation of the Medicare payment schedule.[2] Several of these issues are concerned with the impact of the payment schedule on the behavior of private insurers (throughout this article the terms private payer and private insurer are used synonymously). Private insurers could decide to adopt the relative value methodology used in the Medicare payment schedule for determining their own payment levels for physician services. Private payer adoption of the payment schedule could occur in a variety of ways. The Medicare relative value scale could be fully or partially adopted. Private payers could then apply their own conversion factors in computing monetary payments. Using the same relative value scale, insurers could design plans distinguished by different conversion factors, thereby producing a range of tradeoffs between premium and balance billing levels. If insurers do not choose to adopt the Medicare relative value scale, they might still use it as a guideline when negotiating contractual arrangements with physicians for managed care plans.

The PPRC also notes that private insurers will be affected by the implementation of the payment schedule through changes in physician behavior. Many insurers envision "cost shifting" as a result of the imposition of the payment schedule. Since one of the intentions in the development of the relative value units is to increase the relative payments for evaluation and management services and reduce them for procedural services, some insurers anticipate an increase in fees for procedures for privately insured patients. To the degree that large discrepancies between Medicare and private payments arise, patient access to certain services could in-

1 *Federal Register.* "Medicare Program; Fee Schedule for Physicians' Services, Fee Schedule Update for Calendar Year 1992 and Physician Performance Standard Rates of Increase for Federal FY 1992; Final Rules and Notice." 42 CFR Parts 405, 413, and 415. Washington, D.C. Monday, November 25, 1991. The fee schedule will be fully implemented in 1996 after a phase-in period (1992-1995).

2 Physician Payment Review Commission. *Annual Report to Congress 1991.* Washington, D.C., 1991.

The author is an economist in the AMA Center for Health Policy Research. Helpful comments and suggestions from Cheeling Chan, Research Associate, and Roger Reynolds, Principal Economist, are gratefully acknowledged.

crease or decrease. If private payer reimbursement for certain procedures greatly exceeds Medicare reimbursement, Medicare beneficiaries may have difficulty in obtaining those services.

Data and Methodology

Data from the American Medical Association (AMA) 1991 Socioeconomic Monitoring System (SMS) core survey and the Health Care Financing Administration (HCFA) 1989 Part B Medicare Annual Data (BMAD) procedure file were used to compute average private insurance and Medicare reimbursements as percentages of usual fees. A comparison of private insurance and Medicare reimbursement percentages across specialties and geographic areas were made.

The SMS data include reimbursements from private payers for office visits with established patients, follow-up hospital visits, and selected procedures, as well as physicians' usual fees for these services. Copayments were not included in the reimbursement information collected from SMS. Physicians were asked to indicate only the amount that private insurers reimbursed them for their services. Two Medicare payment amounts were estimated for 1991: (1) the allowed charge under the CPR system, and (2) the payment under the Medicare Fee Schedule. Estimates for 1991 average allowed charges and the Medicare payment schedule were derived from the 1989 BMAD procedure file. The 1991 conversion factor announced by HCFA was used to estimate the Medicare payments. In addition, complete implementation of the payment schedule was assumed. Copayments were excluded from the Medicare reimbursement figures. Medicare reimbursement figures were calculated as 80% of Medicare's allowed charges.

Office Visits and Hospital Visits

A comparison of 1991 average private insurance and Medicare reimbursements as a percentage of usual fees for office and hospital visits is presented in Table 1. On average, private payers reimbursed physicians nearly 90% of the usual fee for both hospital and office visits. Medicare allowed charges for these visits were about 55% of usual fees. Under the payment schedule, physicians would have received an average of 67% and 65% for office visits and hospital visits, respectively.

Among the ten specialty categories, private payers reimbursed other surgical subspecialists, urologists, and general/family practice physicians at least 90% of usual fees for office visits. For hospital visits, general surgeons received the highest percentage of usual fees (97%), followed by urologists (95%) and general/family practice physicians (94%). For both hospital and office visits, obstetrician/gynecologists received the lowest percentage of usual fees from private payers.

Under the payment schedule, general/family practice physicians would have received a relatively higher percentage of usual fees than they did under the CPR system of reimbursement for both office and hospital visits. While general/family practice physicians would have been received a much lower level of reimbursement under the payment schedule than they did from private payers, their reimbursement as a percentage of usual fees relative to that for other specialties would have been closer to private payer reimbursement. In contrast, the payment schedule would have paid general surgeons relatively more for office visits, compared with other specialties, than private payers did.

For office visits, physicians in the West North Central, East North Central, New England, and West South Central census divisions received 93%, 91%, 91%, and 90% of usual fees, respectively, from private payers. Physicians in the Pacific division received 83% of usual fees for office visits from private payers—the smallest proportion among the nine census divisions. Under the CPR method, however, physicians in the Pacific division received the highest percentage of usual fees for office visits, 61%. If the payment schedule had been used to reimburse physicians for office visits for Medicare patients, physicians in the Middle Atlantic and New England divisions would have received the smallest proportions of usual fees whereas those in the West North Central, West South Central, and East North Central would have received the largest proportions. These results suggest that, for office visits, the difference between private payer and Medicare reimbursement patterns of relative payment shares among the census divisions would have been less with the introduction of the payment schedule.

Reimbursement from private payers and Medicare for office visits did not vary much by location of practice in 1991. However, under the new payment schedule, the percentage of a physician's usual fee for an office visit that is reimbursed by Medicare would increase 19 percentage points in nonmetropolitan areas. In comparison, this reimbursement

Table 1. **1991 Average Private Insurance and Medicare Program Reimbursement as a Percentage of Usual Fees**

	Office Visit			Hospital Visit		
	Private	Medicare		Private	Medicare	
		CPR[a]	Payment Schedule		CPR[a]	Payment Schedule
All Physicians[b]	88	55	67	89	56	65
Specialty						
General/Family Practice	90	53	74	94	54	74
Internal Medicine	89	55	63	91	57	63
General Surgery	87	54	71	97	57	74
Orthopedic Surgery	88	56	66	89	55	73
Ophthalmology	·	58	68	·	46	62
Urology	91	55	69	95	46	64
Other Surgical Subspecialties	92	56	65	90	54	66
Pediatrics	88	51	74	84	58	75
Obstetrics/Gynecology	83	50	66	81	35	46
Other	89	44	49	85	50	55
Census Division						
New England	91	52	58	91	51	63
Middle Atlantic	83	52	61	87	52	60
East North Central	91	56	74	91	53	69
West North Central	93	55	77	95	56	77
South Atlantic	88	53	66	87	59	64
East South Central	87	51	69	88	55	72
West South Central	90	53	75	91	60	67
Mountain	88	53	66	91	47	57
Pacific	87	61	63	88	62	60
Location						
Nonmetropolitan	89	56	75	92	57	73
Metropolitan—						
Less than 1,000,000	89	53	66	89	58	68
1,000,000 or more	87	56	63	89	54	59

Source: See text of article.
a. Customary, prevailing, and reasonable charge system.
b. Excludes physicians in radiology, psychiatry, anesthesiology and pathology.

percentage would increase only 7 points in metropolitan areas with one million or more population and 13 points in metropolitan areas with less than one million population.

For hospital visits, changes in the ranking of relative reimbursement among census divisions when the payment schedule, rather than CPR scheme, is used to compute the reimbursement shares are not as dramatic. For private payers, the variation in average reimbursement as a percentage of usual fees across the nine census divisions is relatively small. Physicians in the West North Central division received 95% of usual fees while those in the Middle and South Atlantic divisions received 87% of usual fees from private payers. Under the CPR system, the Pacific, West South Central, and South Atlantic divisions had the largest reimbursement

Table 2. **1991 Average Private Insurance and Medicare Program Reimbursement as a Percentage of Usual Fees for Selected Procedures**

Specialty	Procedure	Private	Medicare	
			CPR[a]	Payment Schedule
Orthopedic Surgery	Total Hip Replacement (CPT 27130)	81	45	32
Ophthalmology	Cataract Surgery (CPT 66984)	85	55	35
Obstetrics/Gynecology	Total Hysterectomy (CPT 58150)	83	34	30

Source: See text of article.
a. Customary, prevailing, and reasonable charge system.

proportions while the Mountain division had the smallest. If the payment schedule had been used, the West North Central, East South Central, and East North Central divisions would have received the largest proportions. The Middle Atlantic, Pacific, and Mountain divisions each would have received the smallest proportions.

Reimbursement from private payers and Medicare for hospital visits did not vary much by location of practice in 1991. However, under the new payment schedule, the percentage of a physician's usual fee for a hospital visit that is reimbursed by Medicare would increase 16 percentage points in nonmetropolitan areas. In comparison, this reimbursement percentage would increase only 5 points in metropolitan areas with one million or more population and 10 points in metropolitan areas with less than one million population.

Selected Procedures

The procedures for which questions on private payer reimbursement and usual fees were asked on the SMS survey are total hip replacement (CPT 27130), cataract surgery (CPT 66984), and total hysterectomy (CPT 58150). These questions were asked of selected specialties: orthopedic surgery, ophthalmology, and obstetrics/gynecology, respectively. Table 2 presents the 1991 average private insurance and estimated Medicare reimbursement as a percentage of usual fees for these procedures. Only information for these specialties and the corresponding procedures was drawn from the BMAD procedure file.

Under the payment schedule, the average reimbursement percentage for each of the procedures is less than under the CPR system. For each of the procedures, the average reimbursement share under the payment schedule would have been about one-third while private payers reimbursed physicians at least 80% of usual fees. Together, Table 1 and Table 2 illustrate one of the major implications of the new Medicare payment system—a redistribution of reimbursement funds from procedural services to primary care services.

Discussion

These findings also illustrate one of the implications of the newly implemented relative value scale, a restructuring of incentives to encourage more physicians to enter primary care specialties. A significant reduction in the share of usual fees that will be reimbursed for procedures has exacerbated the discrepancy between private payer and Medicare reimbursement. The widening gap for procedures implies that Medicare patients may have experienced reduced access to those services in the absence of large reductions in private payer reimbursement. Eventually, private payers may adopt features of the Medicare payment schedule, particularly the relative value scale, that would bring reimbursement for procedures more in line with Medicare payment levels. The PPRC has reported that the relative value scale is the feature of the new payment schedule that private payers are most likely to use if they restructure their reimbursement for physician services.[3]

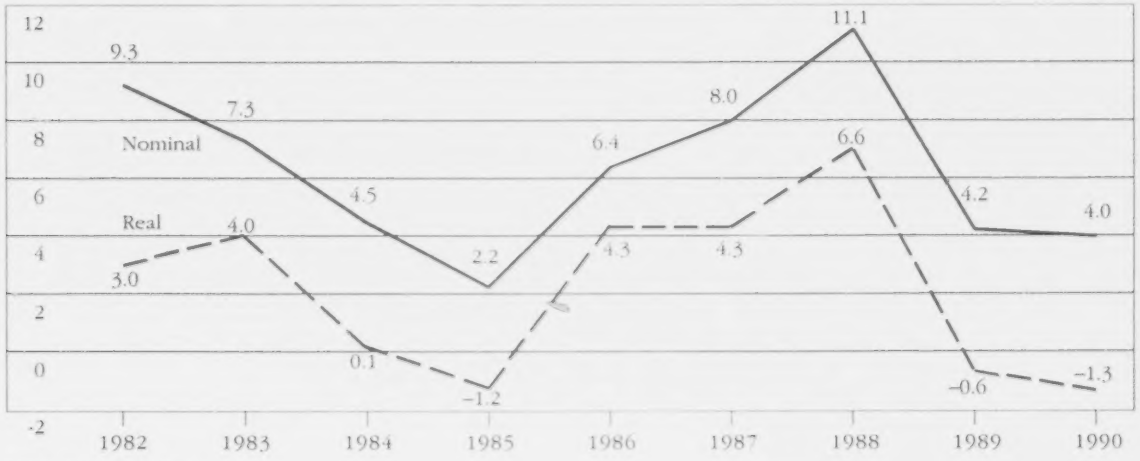
The data on private payer and Medicare reimbursement proportions for office and hospital visits also illustrate the redistributive impacts of the new payment schedule. Physicians in general/family practice, a specialty in which a greater proportion of physician services are evaluation and management, will receive a relatively higher percentage of usual fees. With the initial introduction of the new Medicare payment schedule, the reimbursement pattern among the specialties for the Medicare program is, in general, likely to be closer to that for private payers. Furthermore, the data presented here imply that the pattern of reimbursement among geographic areas is also likely to be somewhat closer to private payer patterns. Therefore, for office and hospital visits, private payers may be more likely to adjust their own "conversion factors" rather than alter their "geographic adjustment factors" if they adopt features of the new Medicare physician payment system.

3. Physician Payment Review Commission. *Annual Report to Congress 1991*. Washington, D.C., 1991.

Physician Earnings, 1981-1990

By James W. Moser

Figure 1. **Year-to-Year Percent Changes in Median Physician Net Income after Expenses before Taxes, 1981-1990.**



Source: See text of article.

The medical practice environment continues to evolve, with important consequences for the monetary rewards to physicians. While the new Medicare Fee Schedule did not go into effect until January 1, 1992, restraint on payment growth—if not outright reductions—affected many procedures under the old payment system still in effect through 1990. Physicians have become more involved with alternative, "managed care" delivery systems. Utilization review activities have continued to become more prevalent. With health care access and cost problems continuing to escalate, many in the socio-political-medical arena are calling for health care system reform, so the future holds the prospect of further dramatic changes in the medical practice environment.

The impacts of these and other factors have important implications for physician earnings. This report presents and discusses time trends and patterns across specialties and geographic regions in physician net income. The general period of study is

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Table 1. **Median Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1981-1990**

	Median Net Income			Average Annual Percent Change	
	1981	1990 Nominal	1990 Real[a]	Nominal	Real
All physicians[b]	$75	$130	$90	6.3%	2.1%
Specialty					
General/family practice	60	93	65	5.0	0.8
Internal medicine	72	120	83	5.8	1.7
Surgery	100	200	139	8.0	3.7
Pediatrics	55	100	70	6.9	2.6
Obstetrics/gynecology	96	184	128	7.5	3.2
Radiology	105	200	139	7.4	3.2
Psychiatry	64	107	74	5.9	1.7
Anesthesiology	105	200	139	7.4	3.2
Pathology	75	150	104	8.0	3.7
Census Division					
New England	65	120	83	7.0	2.8
Middle Atlantic	70	125	87	6.7	2.4
East North Central	80	140	97	6.4	2.2
West North Central	80	130	90	5.5	1.4
South Atlantic	77	133	92	6.3	2.1
East South Central	80	140	97	6.4	2.2
West South Central	80	150	104	7.2	3.0
Mountain	74	135	94	6.9	2.7
Pacific	77	135	94	6.4	2.2

Source: See text of article.
a. In 1981 dollars.
b. Includes physicians in specialties not listed separately.

from 1981 to 1990, with special emphasis given to the newly-reported figures for 1990. Physician net income, or earnings, is defined to be net income after expenses but before taxes. Income includes all earnings from medical practice, including contributions into deferred compensation plans. A physician is defined as a nonfederal M.D. involved at least 20 hours per week in patient care activities. Both office-based and hospital-based physicians are included; however, residents, clinical fellows, and physicians whose primary activities are research or administration are excluded.

The 1981-1990 income data used in this report are drawn from the 1982-1991 American Medical Association Socioeconomic Monitoring System (SMS) core surveys. The data have been weighted to adjust for survey non-response bias to improve the accuracy of estimates of income for the entire physician population. Adjustments to income for the effects of inflation since 1981 were made using the All Items Consumer Price Index for urban consumers, released by the U.S. Bureau of Labor Statistics. An appendix describes the methods used in making these adjustments.

Trends in Nominal and Real Earnings

Incomes of physicians, as with other occupations, are not distributed according to the classical "bell-shaped" curve. Rather, there are a small number of very high values that tend to inflate the mean or average of the distribution. The mean, therefore, does not provide a good measure of a "typical" individual in the population. Instead, it is the median, or 50th percentile, that best reflects a "typical" earnings level. Year-to-year changes in median physician earnings are displayed in Figure 1.

Table 2. **Distribution of Physician Net Income (in thousands of dollars) after Expenses before Taxes, by Specialty and Census Division, 1990**

	25th Percentile	Median	75th Percentile	Mean	Standard Error of the Mean
All physicians[a]	$90	$130	$200	$164.3	$2.2
Specialty					
General/family practice	65	93	125	102.7	2.7
Internal medicine	82	120	180	152.5	5.5
Surgery	135	200	300	236.4	6.7
Pediatrics	70	100	130	106.5	3.4
Obstetrics/gynecology	125	184	260	207.3	8.7
Radiology	130	200	275	219.4	9.2
Psychiatry	80	107	138	116.5	3.3
Anesthesiology	150	200	250	207.4	6.0
Pathology	107	150	225	172.5	9.0
Census Division					
New England	90	120	170	142.5	7.1
Middle Atlantic	88	125	200	156.1	5.2
East North Central	93	140	200	172.4	5.9
West North Central	90	130	193	151.4	5.9
South Atlantic	90	133	208	169.0	5.2
East South Central	92	140	230	169.0	8.5
West South Central	90	150	230	178.8	7.9
Mountain	85	135	210	170.9	11.3
Pacific	90	135	200	162.5	4.9

Source: See text of article
a. Includes physicians in specialties not listed separately.

Table 1 presents median net income data for 1981 and 1990. Average annual percentage increases in median physician earnings are also reported in Table 1.

Both Figure 1 and Table 1 present "nominal" and "real" income figures. Unadjusted income is referred to as "nominal" income. "Real" income represents adjustment for inflation. Real net income figures presented in Table 1 express physician earnings in terms of the purchasing power of a dollar in 1981. Year-to-year growth in real net income, presented in Figure 1, represents growth net of the inflation that occurred during the year in which income growth was measured.

Table 1 shows that median net income rose from $75,000 in 1981 to $130,000 in 1990. This increase represents an average annual growth rate of 6.3%. However, after controlling for the effects of inflation over the period, physician earnings rose at an average annual rate of 2.1%, or to just $90,000 in 1981 dollars. Figure 1 shows that substantial year-to-year variations in real and nominal income growth were experienced.

Specialty and geographic variations in the level and growth of physician earnings are also shown in Table 1. Highlights from the data include the following:

- Median physician earnings in 1990 were lowest for general/family practice ($93,000) and pediatrics ($100,000).
- Median physician earnings were highest in 1990 for the specialties of surgery, radiology, and anesthesiology—$200,000 each.

Table 3. **Consumer Price Index 1970 to 1990**[a]

Year	CPI	Year	CPI
1970	38.8	1981	90.9
1971	40.5	1982	96.5
1972	41.8	1983	99.6
1973	44.4	1984	103.9
1974	49.3	1985	107.6
1975	53.8	1986	109.6
1976	56.9	1987	113.6
1977	60.6	1988	118.3
1978	65.2	1989	124.0
1979	72.6	1990	130.7
1980	82.4		

Source: U.S. Bureau of Labor Statistics, All Items Consumer Price Index for all urban consumers.
a. Base year 1982–84=100.

- Over the period 1981-1990, average annual growth in nominal median net income across specialties ranged from 5.0% for general/family practice to 8.0% for surgery and pathology.
- In looking at real income change between 1981 and 1990 on an annual average basis, growth ranged from a low of 0.8% for general/family practice to a high of 3.7% for both surgery and pathology.
- Earnings in 1990 varied less across geographic regions than across specialties; median nominal net income was $120,000 in New England and $150,000 in the West South Central states. (See Appendix D in *Socioeconomic Characteristics of Medical Practice 1992* for a list of states that comprise each region.)
- Growth in median physician earnings from 1981-1990 across census divisions ranged from 5.5% in nominal terms in the West North Central states (1.4% in real terms), to 7.2% in nominal terms in the West South Central states (3.0% in real terms).

As a real growth comparison figure, median family income in the United States, adjusted for inflation, grew at an annual average rate of 1.0% during the period 1981-1990[1].

Distribution

Although median net income from medical practice is the single statistic that best represents the "typical" physician's earnings, there are other measures that provide further information on the range of earnings that might be considered typical. Another picture of earnings emerges by combining a measure of central tendency with a dispersion statistic. This is often done by examining means and standard errors of the distribution. It may also be accomplished by examination of medians and interquartile ranges, i.e., ranges from the 25th percentile of earnings to the 75th percentile. Table 2 reports both sets of statistics for physician earnings in 1990. Several points are suggested by Table 2:

- Comparison of the mean to the median income indicates that a majority of physicians earn less than the average earnings level. Although average net income among physicians was $164,300, half of all physicians earned less than $130,000.
- Dispersion in earnings is measured as the difference between earnings at the 25th percentile and earnings at the 75th percentile. Among all physicians, dispersion was $110,000. Earnings of lower paid specialties are generally less disperse than earnings of higher paid specialties.
- No clear or explainable pattern is apparent in the dispersion of earnings across census divisions. Dispersion of earnings ranged from $80,000 to $140,000.

Physician Earnings in Context

Physician income is high in comparison with those of many other occupations. There is no single explanation for why this is the case. Following are a few factors that should be considered.

- Physicians work long hours, often under stress, and must continually keep up with new medical developments. The average number of hours worked per week was 59.1 in 1990, about 48% in excess of the typical 40-hour week.
- Part of the reason for the rising trend in the statistics reported here is that the physician population is aging slightly and most are still on the rising section of the career earnings path. Income statistics will rise over time as more physicians enter their peak earnings years.

- Physicians do not begin their careers until later in life. In 1989, the average age of a medical school graduate was 28. Counting residency training, many physicians are in their early thirties before beginning to practice.

- Many physicians incur a high educational debt by the time they begin to practice. According to the Association of American Medical Colleges, about 79% of 1990 graduates reported some level of educational debt, with the average for those with indebtedness amounting to $46,224. For the same graduating class, 31.6% had debt greater than $50,000, while 12.8% had debt of over $75,000[2].

Summary and Conclusions

Median physician earnings rose 4.0% in 1990, less than inflation of 5.4%, marking the second consecutive year that nominal earnings did not keep pace with inflation. Over the longer 1981-1990 period, median earnings grew at an average yearly rate of 6.3% in nominal terms, or 2.1% when adjusted for overall price level changes.

The rate of growth in median earnings varied considerably by specialty between 1981 and 1990. General/family practice experienced the lowest earnings growth, while surgery and pathology had the highest growth. Earnings were less variable across regions than across specialties. Nominal earnings growth was lowest in the West North Central states and highest in the West South Central states.

A majority of physicians earned less than the mean net income of $164,300 in 1990. One-half of physicians earned less than $130,000 and one-fourth made less than $90,000. At one end of the income distribution, half of all general/family practice physicians earned less than $93,000 and one-fourth earned less than $65,000. At the other end, one-half of surgeons, radiologists, and anesthesiologists earned $200,000 or more and one-fourth earned $300,000 or more.

Appendix

In the preceding article, 1990 nominal net income figures were converted to real net income figures in order to control for the effects of inflation that occurred during the period 1981-1990. Real net income figures were expressed in terms of the purchasing power of a dollar in 1981. It is also possible to express real net income in terms of the purchasing power of a dollar in any year. This can be done using the figures from the All Items Consumer Price Index (CPI) that are presented in Table 3.

The basic formula for converting dollars in one year to a number that expresses their purchasing power in another year is as follows:

$$\text{Real dollars in year } i = CPI_i/CPI_j \times \text{nominal dollars in year } j$$

where CPI_i = the Consumer Price Index for the year in which the real dollars will be expressed (year i), and CPI_j = the Consumer Price Index for the year in which the nominal dollars are expressed (year j).

For example, the following formula was used to convert 1990 nominal median net income to real income in 1981 dollars:

$$\text{Real net income for 1990} = CPI_{1981}/CPI_{1990} \times \text{Nominal net income for 1990} =$$

$$(90.9)/(130.7) \times \$130{,}000 = \$90{,}000.$$

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1. U.S. Department of Commerce (1990).
2. Paul Jolly, et al. (1991).

Medical Professional Liability Claims and Premiums, 1985–1990

By Martin L. Gonzalez

Medical professional liability continues to impact physicians and their practices. Physicians' 1990 liability experiences indicate a moderation in measures of professional liability claim frequency as well as in average premiums. In this article, trends in claim frequency and cost of insurance premiums are examined. Specific findings of the analysis include the following:

- The average annual rate of professional liability claims increased from 7.4 per 100 physicians in 1989 to 7.7 per 100 in 1990. However, the increase was not statistically significant. Since 1985, the overall claims rate has declined at an average annual rate of 8.9%. This appears to be the result of moderation between 1987 and 1990, coupled with a decline between 1985 and 1987.
- There were no statistically significant changes in the claims rate among specialties and geographic areas between 1989 and 1990.
- Average professional liability premiums also appeared to moderate between 1989 and 1990. Still, premiums have increased steadily in recent years. During the period 1982-1990, average professional liability premiums increased at an average annual rate of 12.1% for all physicians. In contrast, total physician practice revenues increased at an average annual rate of 7.5% during this period and inflation averaged 3.9% per year.

The information included in this article is derived from 1983 to 1991 AMA Socioeconomic Monitoring System (SMS) core surveys of nonfederal patient care physicians, excluding residents. For purposes of this study, information reported by respondents to the surveys was weighted to correct for survey nonresponse in order to provide a more accurate estimate of the experience of the entire physician population. This may cause some information to differ from previously reported SMS surveys relating to medical professional liability.

Trends in Professional Liability Claims

Claim frequency for all physicians was 7.7 claims per 100 physicians in 1990, as compared with 7.4 per 100 in 1989. While the claims rate did increase between 1989 and 1990, that increase was not statistically significant. In general, the results indicate a leveling off in the claims rate in contrast to the increases of the early- and mid-1980s. Since 1985, the overall claims rate has declined at an average annual rate of 8.9%. However, only two specialty groups (surgery and obstetrics/gynecology) and two census divisions (New England and the Middle Atlantic) experienced statistically significant declines during this period. Although the claims rate has dropped for obstetricians/gynecologists and surgeons, these specialists continue to be at the highest risk of incurring a claim.

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Table 1. **Annual Professional Liability Claims per 100 Physicians, by Specialty and Census Division, 1985–1990**

	1985	1986	1987	1988	1989	1990	Average Annual Rate of Change 1985–1990
All physicians	10.2	9.2	6.7[a]	6.4	7.4	7.7	-8.9%[b]
Specialty							
General/family Practice	5.7	7.6	5.7	6.2	6.6	5.9	1.2
Internal medicine	6.2	5.5	4.5	4.3	5.9	6.2	0.0
Surgery	16.8	15.8	12.7	10.2	11.2	11.5	-11.9[b]
Pediatrics	7.2	6.8	4.5	3.7	5.4	9.7	-10.4
Obstetrics/gynecology	25.8	13.0[a]	8.0	15.1[a]	13.5	11.9	-22.7[b]
Radiology	12.8	11.5	8.0	5.2	5.0	8.7	-12.1
Psychiatry	2.9	4.5	1.6	0.6	5.1[a]	2.4	-6.1
Anesthesiology	7.5	8.7	4.6	4.0	5.9	5.3	-10.9
Pathology	3.3	1.9	4.9	3.6	2.5	1.5	-23.1
Other	10.4	9.1	5.9	6.7	5.7	7.0	-12.4
Census Division							
New England	7.6	10.1	4.0	8.4	4.0	2.4	-31.9[b]
Middle Atlantic	13.9	12.7	7.8	7.1	7.5	9.6	-11.6[b]
East North Central	13.2	10.1	10.5	7.5	10.8	9.5	-10.4
West North Central	9.6	8.6	3.9	4.0	5.9	5.8	-15.5
South Atlantic	7.0	7.5	5.6	4.7	4.8	5.7	-6.6
East South Central	5.5	7.3	9.2	6.4	9.0	5.6	0.6
West South Central	12.4	8.6	6.3	10.4	10.7	11.4	-2.8
Mountain	6.2	9.0	4.1	5.0	5.6	8.8	12.4
Pacific	9.3	7.5	5.4	4.4	6.1	7.0	- 9.0

Source: See text of article.
a. Change from previous year statistically significant at the p=.05 level.
b. 1985-1990 change statistically significant at the p=.05 level.

It is unclear whether such moderation will continue. Despite the moderation observed, the claims rate is still somewhat higher than it was prior to 1981. As reported by Gonzalez (1986), the average annual claims rate prior to 1981 was 3.2 claims per 100 physicians. However, caution should be exercised when comparing this figure to figures reported in Table 1 because of a methodological change in the way the claims rate was calculated for 1985 and after.

The incidence of liability claims is not confined to a small proportion of the physician population. As Table 2 indicates, 38.9% of all physicians have incurred at least one claim during their careers. Over one-half of all obstetrician-gynecologists (57.0%) and surgeons (52.5%) have incurred at least one claim. Across census divisions, physicians in the Middle Atlantic, East North Central, Pacific and West South Central areas report the highest career percentages.

In 1990, 9.6% of surgeons incurred a claim, the highest among specialties. Across census divisions, physicians in the West South Central region (9.5%) were most likely to have incurred a claim in 1990.

Trends in Professional Liability Premiums

Average professional liability insurance premiums, as reported here, embody coverage limits of insurance purchased as well as the price of insurance at those limits. Average premiums paid by self-employed physicians from 1982 to 1990 are shown in Table 3. Premiums rose at a 12.1% annual rate during this period, increasing from $5,800 in 1982 to $14,500 in 1990. In contrast, the average annualized

Table 2. **Percent of Physicians Incurring Professional Liability Claims, 1985-1990 and in Career, by Specialty and Census Division**

	Percent Incurring Claims Annually						Average Annual Rate of Change 1985–1990	Percent Incurring Claims in Career as of 1990
	1985	1986	1987	1988	1989	1990		
All physicians	8.5%	7.6%	6.0%[a]	5.8%	6.6%	6.6%	-8.1%[b]	38.9%
Specialty								
General/family practice	5.5	6.3	5.1	5.7	4.9	5.0	-3.1	36.3
Internal medicine	5.4	4.8	4.3	3.8	5.5	5.6	1.2	32.4
Surgery	13.6	12.3	11.0	8.8	9.9	9.6	-11.0[b]	52.5
Pediatrics	6.6	5.7	3.9	3.5	5.4	7.9	6.2	32.2
Obstetrics/gynecology	20.0	10.9[a]	6.7	14.1[a]	13.2	9.3	-22.5[b]	57.0
Radiology	11.2	10.5	6.5	4.3	5.0	8.3	-9.5	39.4
Psychiatry	2.9	4.1	1.6	0.6	4.4[a]	2.0	-11.6	19.3
Anesthesiology	7.5	8.2	4.2	4.0	5.9	5.3	-10.9	36.7
Pathology	3.3	1.9	4.9	3.6	2.5	1.5	-23.1	20.4
Other	7.5	7.4	5.7	6.4	5.3	6.4	-5.1	40.6
Census Division								
New England	7.2	9.5	4.0[a]	7.4	2.9[a]	2.4	-30.7[b]	30.9
Middle Atlantic	11.5	9.7	6.5[a]	6.5	7.4	8.4	-9.9	45.9
East North Central	10.6	8.3	8.9	6.4	9.3[a]	8.6	-6.7	45.7
West North Central	7.2	7.8	3.5[a]	4.0	5.6	5.2	-10.3	34.4
South Atlantic	6.3	6.2	5.2	4.5	4.6	4.8	-8.7	30.8
East South Central	4.5	5.9	7.8	6.4	7.6	5.2	4.9	35.2
West South Central	10.4	7.8	6.1	8.7	9.6	9.5	-3.0	41.5
Mountain	5.2	7.5	4.1	4.6	5.6	6.2	6.0	29.5
Pacific	8.0	6.2	5.2	4.1	5.3	5.9	-9.7	41.9

Source: See text of article.
a. Change from previous year statistically significant at the p=.05 level.
b. 1985–1990 change statistically significant at the p=.05 level.

rate of inflation was 3.9% and total practice revenues increased by 7.5% annually over the same period.

Table 4 presents detailed information on professional liability insurance premiums paid by self-employed physicians between 1985 and 1990. Average professional liability premiums appeared to moderate between 1989 and 1990. The average premium in 1990 was $14,500, a statistically nonsignificant change from the $15,500 average premium reported for 1989. This marks the third consecutive year in which premiums have leveled off, after the increases observed through 1987. Still, since 1985, premiums have increased at an average annual rate of 11.4% for all physicians.

Among specialties, there is some variation in premiums paid. Specialists in obstetrics/gynecology paid, on average, the highest professional liability insurance premiums in 1990 ($34,300) while psychiatrists paid the lowest ($4,500). Premiums are up significantly over 1985, with average annual increases ranging from 4.7% for general/family practice to 35.4% for pathology. These variations tend to reflect differences in claims rates. The correspondence, however, is not complete since premiums are affected by the severity of claims, coverage limit, and other factors in addition to claims rates.

Premiums also varied by geographical area, type of practice, location, and physician age. Tables 43-44, located in the Detailed Statistics section of *Socioeconomic Characteristics of Medical Practice 1992*, provide full breakdowns by these variables.

Table 3. **Average Professional Liability Insurance Premiums Paid and Total Practice Revenues of Self-Employed Physicians, 1982–1990**

	Insurance Premiums Paid[a]	Total Practice Revenues[a]	Premiums as a Percent of Revenues
1982	$5.8	$186.0	3.1%
1983	6.9	199.3	3.5
1984	8.4	212.2	4.0
1985	10.5	226.8	4.6
1986	12.8	249.5	5.1
1987	15.0	269.9	5.6
1988	15.9	300.7	5.3
1989	15.5	323.7	4.8
1990	14.5	332.4	4.7
1990 net of inflation[b]	11.4	245.4	4.7
Average annual percent increase			
1982-1990	12.1%	7.5%	.
1982-1990 net of inflation[b]	8.0	3.5	.

Source: See text of article.
a. In thousands of dollars.
b. In 1982 dollars.

Table 4. **Average Professional Liability Premiums Paid by Self-Employed Physicians, 1985–1990**

	Annual Premiums (in thousands of dollars)						Average Annual Rate of Change
	1985	1986	1987	1988	1989	1990	1985–1990
All physicians	$10.5	$12.8[a]	$15.0[a]	$15.9	$15.5	$14.5	11.4%[b]
Specialty							
General/family practice	6.8	7.5	8.9	9.4	9.0	7.8	4.7[b]
Internal medicine	5.8	7.1[a]	8.4[a]	9.0	8.2	9.2	16.6[b]
Surgery	16.6	21.5[a]	24.5[a]	26.5	25.8	22.8	11.2[b]
Pediatrics	4.7	6.5[a]	7.1	9.3	7.8	7.8	18.4[b]
Obstetrics/gynecology	23.5	29.5[a]	35.3[a]	35.3	37.0	34.3	13.4[b]
Radiology	8.9	10.4	9.5	12.9[a]	13.3	11.5	8.9[b]
Psychiatry	2.5	3.4[a]	3.8	4.4	6.3	4.5	21.6[b]
Anesthesiology	17.9	20.5[a]	22.9	23.6	21.7	20.8	5.1[b]
Pathology	3.1	4.4[a]	6.2[a]	4.9	5.5	7.7	35.4[b]
Other	6.0	8.5[a]	8.4	8.5	9.3	9.5	16.6[b]

Source: See text of article.
a. Change from previous year statistically significant at the p=.05 level.
b. Total 1985-1990 change statistically significant at the p=.05 level.

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Detailed Statistics

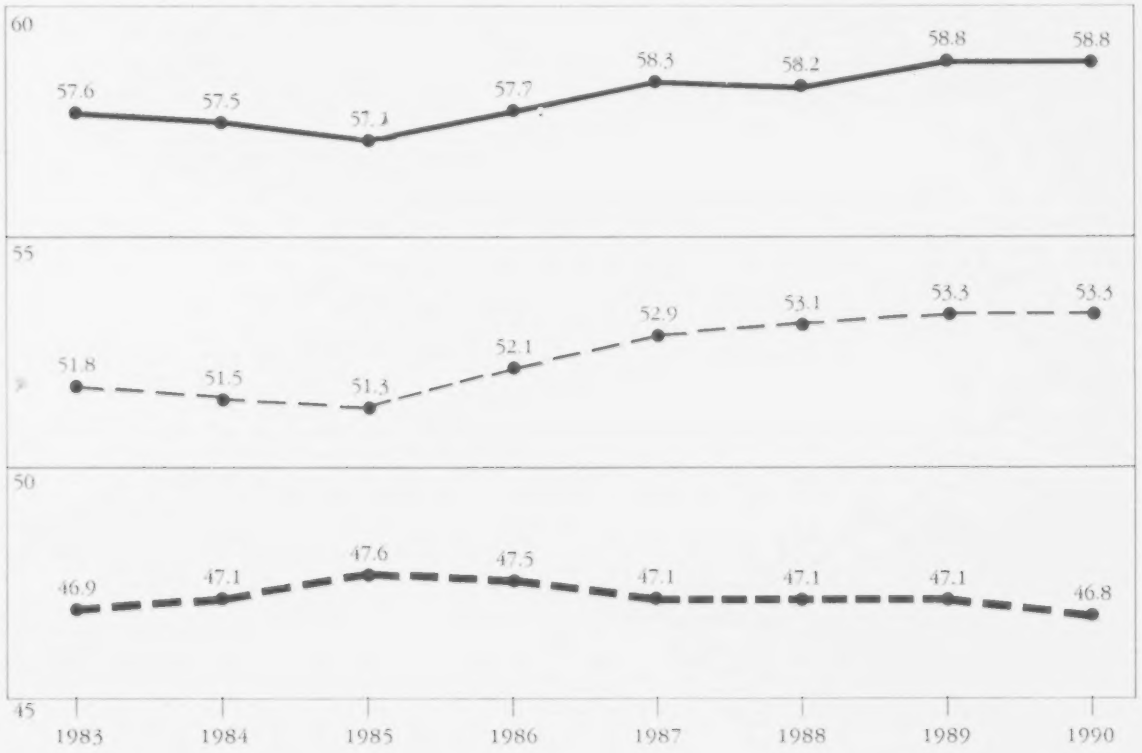
Weeks and Hours of Practice
Utilization of Physician Services
Hospital Utilization by Physicians
Fees for Physician Visits
Professional Expenses of Physicians
Physician Net Income after Expenses before Taxes

Weeks and Hours of Practice

The time spent in practice by physicians is measured in weeks per year and hours per week. Three measures of total hours in practice can be distinguished. Total professional hours combines hours in patient care with those in other professional activities, such as teaching, research, and administration. Hours in patient care activities excludes other professional hours. Direct patient care hours includes only time spent directly seeing patients; time spent in patient-related activities, such as interpreting tests and telephone contacts with patients and their families, is excluded. Direct patient care hours are allocated by activity into hours spent seeing patients in the office, on hospital rounds, in surgery (operating and delivery rooms), and in other settings.

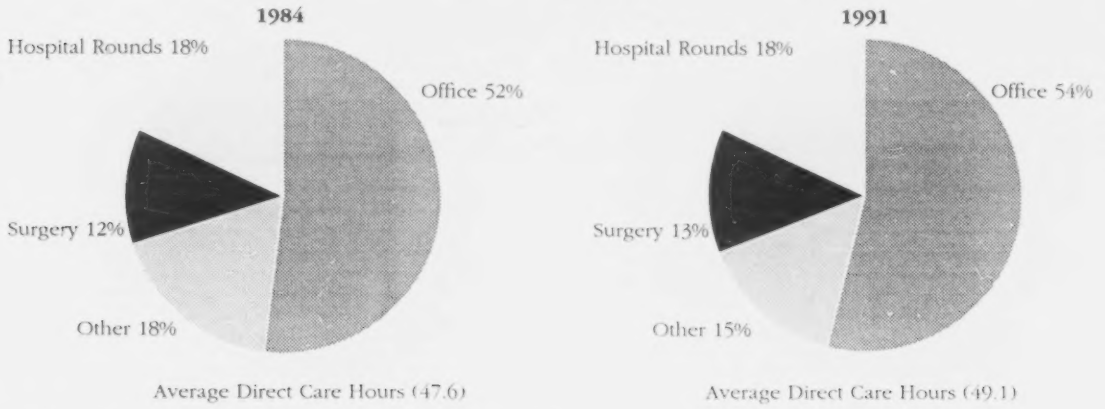
Figure 1 indicates that average weeks of practice per year was relatively stable from 1983 to 1990. Figure 2 indicates that hours per week and the allocation of direct patient care hours by activity were relatively stable from 1984–1991. Significant variations in average direct patient care hours and their allocation in 1991 by specialty are shown in Figure 3.

Figure 1. **Average Weeks and Hours per Week of Practice by All Physicians, 1983-1990**



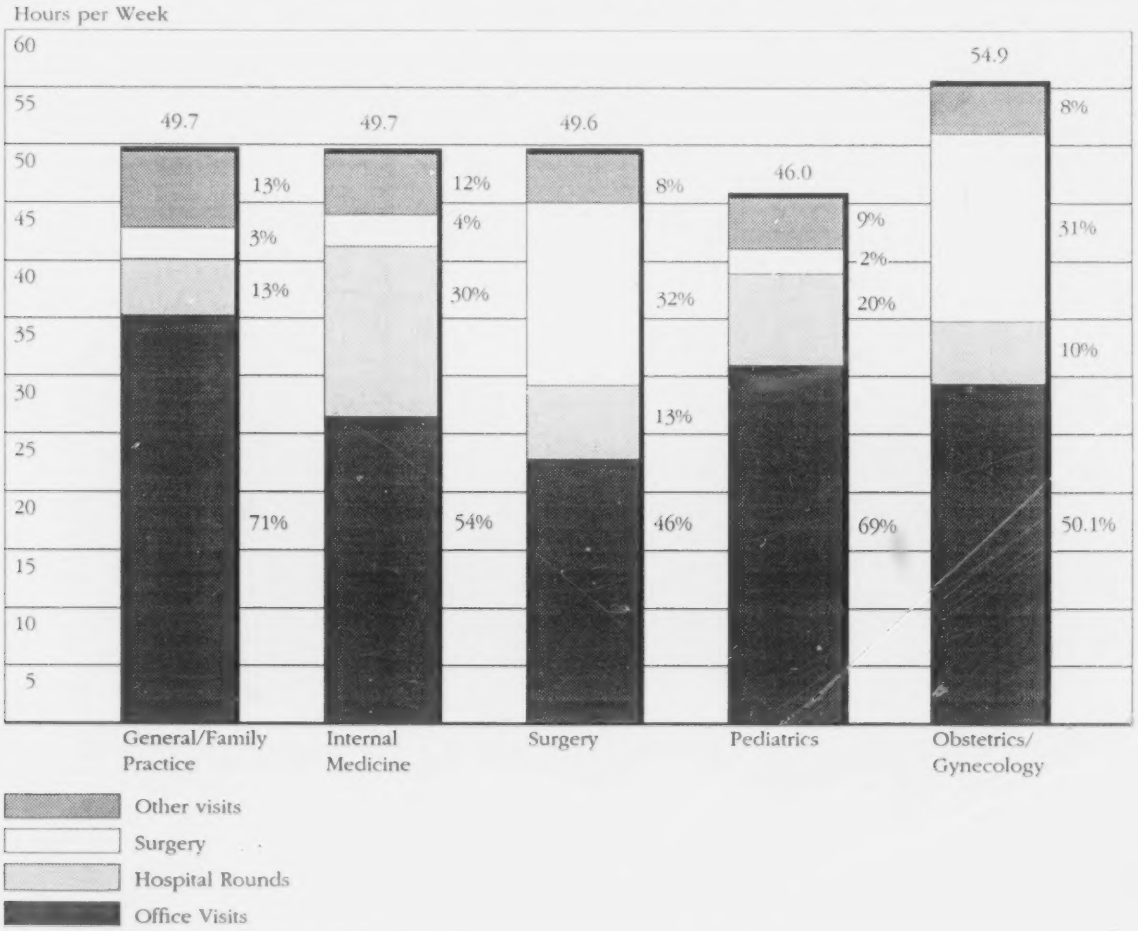
Source: AMA Socioeconomic Monitoring System 1984–1991 core surveys.

Figure 2. **Distribution of Average Direct Patient Care Hours per Week of All Physicians, 1984 and 1991**[a]



Source: AMA Socioeconomic Monitoring System 1984 and 1991 core surveys.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Figure 3. **Distribution of Average Direct Patient Care Hours per Week, by Specialty, 1991**[a]



Source: AMA Socioeconomic Monitoring System 1991 core survey.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Table 1. **Mean Number of Weeks Practiced, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	46.8	47.3	47.1	46.5	47.2	46.9	44.8	47.5	45.4	46.5
Census Division										
New England	46.7	·	46.9	45.5	46.9	·	·	47.2	·	·
Middle Atlantic	46.9	47.8	46.8	46.5	46.4	46.7	45.4	47.8	46.7	47.0
East North Central	46.5	47.0	47.1	46.1	46.0	46.6	45.3	46.6	44.7	·
West North Central	46.3	46.2	46.2	46.5	47.7	46.7	·	·	43.8	·
South Atlantic	47.2	47.4	48.1	46.8	48.1	46.9	44.9	47.8	45.2	45.2
East South Central	47.3	49.0	47.6	45.5	·	·	·	·	·	·
West South Central	47.7	49.1	48.2	47.5	48.4	47.4	44.5	48.0	46.7	·
Mountain	46.4	46.5	48.2	45.2	·	·	·	·	·	·
Pacific	46.5	46.3	46.3	47.3	47.2	47.1	43.1	46.9	45.1	·
Type of Practice										
Solo	48.0	48.2	48.1	47.5	49.1	48.0	·	47.5	47.1	·
Non-solo	46.3	46.6	46.6	45.8	46.5	46.3	44.6	47.4	45.1	46.3
Location										
Nonmetropolitan	47.3	47.8	46.0	47.4	·	47.5	·	·	·	·
Metropolitan—										
Less than 1,000,000	46.7	46.8	47.1	46.4	47.3	46.4	44.5	47.4	45.8	47.0
1,000,000 and over	46.9	47.7	47.3	46.6	47.1	47.3	44.8	47.5	45.1	46.0
Employment Status										
Self-employed	47.3	48.1	47.6	46.9	48.2	47.4	45.0	47.4	45.8	47.6
Non-self-employed[c]	45.8	45.5	46.0	44.9	45.6	45.7	44.5	47.5	44.8	45.7
Employee	45.6	45.9	45.8	44.6	45.5	45.6	43.7	47.3	44.5	44.9
Independent contractor	46.7	43.8	47.4	·	·	·	47.0	48.4	45.5	·
Physician Age										
Less than 36 years	44.5	43.9	44.4	43.8	43.8	45.7	40.4	47.0	44.3	·
Less than 40 years	45.9	45.4	46.2	45.5	45.9	46.3	42.9	47.4	44.4	45.8
36-45 years	47.2	47.6	47.9	46.6	48.2	47.0	45.9	47.5	45.2	45.1
46-55 years	47.2	48.2	47.9	46.9	47.4	47.5	44.7	47.8	45.6	48.0
56-65 years	47.4	48.7	47.7	46.9	47.8	46.6	45.2	47.0	47.2	47.5
66 or more years	47.6	48.2	46.9	47.7	·	·	·	48.0	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 1 (continued). **Standard Error of the Mean Number of Weeks Practiced, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	0.08	0.25	0.19	0.18	0.30	0.23	0.32	0.15	0.30	0.49
Census Division										
New England	0.24	·	0.54	0.74	1.40	·	·	0.20	·	·
Middle Atlantic	0.18	0.96	0.47	0.38	0.82	0.69	0.53	0.24	0.33	0.71
East North Central	0.20	0.51	0.49	0.52	1.08	0.69	0.64	0.66	0.72	·
West North Central	0.31	0.86	0.81	0.75	0.35	0.54	·	·	0.93	·
South Atlantic	0.17	0.59	0.30	0.39	0.49	0.70	0.84	0.35	1.07	1.37
East South Central	0.39	0.34	0.60	1.32	·	·	·	·	·	·
West South Central	0.21	0.21	0.34	0.53	0.77	0.54	1.06	0.44	0.44	·
Mountain	0.39	1.13	0.43	1.25	·	·	·	·	·	·
Pacific	0.22	0.88	0.65	0.22	0.67	0.51	1.28	0.40	0.78	·
Type of Practice										
Solo	0.11	0.33	0.26	0.21	0.27	0.38	·	0.20	0.78	·
Non-solo	0.10	0.36	0.25	0.28	0.38	0.28	0.33	0.22	0.32	0.50
Location										
Nonmetropolitan	0.26	0.37	1.05	0.50	·	0.71	·	·	·	·
Metropolitan—										
Less than 1,000,000	0.13	0.46	0.29	0.30	0.48	0.42	0.43	0.26	0.40	0.50
1,000,000 and over	0.11	0.36	0.24	0.25	0.40	0.24	0.53	0.17	0.43	0.84
Employment Status										
Self-employed	0.07	0.19	0.17	0.17	0.16	0.22	0.33	0.17	0.34	0.31
Non-self-employed[c]	0.18	0.70	0.50	0.68	0.68	0.55	0.56	0.27	0.52	0.83
Employee	0.22	0.75	0.54	0.76	0.72	0.59	0.71	0.32	0.73	1.14
Independent contractor	0.34	1.80	1.28	·	·	·	0.59	0.41	0.65	·
Physician Age										
Less than 36 years	0.36	1.04	0.82	1.14	1.28	0.97	1.75	0.88	0.71	·
Less than 40 years	0.20	0.62	0.45	0.57	0.75	0.56	0.96	0.43	0.55	1.49
36-45 years	0.09	0.29	0.15	0.25	0.18	0.32	0.29	0.24	0.47	1.02
46-55 years	0.11	0.39	0.16	0.26	0.49	0.29	0.41	0.25	0.47	0.48
56-65 years	0.12	0.23	0.25	0.28	0.39	0.55	0.79	0.30	0.59	0.49
66 or more years	0.22	0.38	0.61	0.40	·	·	·	0.27	·	·

Table 2. **Mean Number of Weeks Practiced per Year, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	46.9	47.1	47.6	47.5	47.1	47.1	47.1	46.8
Specialty								
General/Family Practice	47.2	47.6	48.5	48.3	47.7	47.9	48.1	47.3
Internal Medicine	47.0	47.2	47.8	47.9	47.4	47.3	47.1	47.1
Surgery	46.9	47.3	47.3	47.1	47.0	46.9	46.9	46.5
Pediatrics	47.2	47.4	48.0	47.8	47.4	47.2	47.4	47.2
Obstetrics/Gynecology	47.1	46.9	48.0	47.6	47.1	47.3	47.3	46.9
Radiology	45.4	45.4	45.4	45.6	45.2	45.3	45.1	44.8
Psychiatry	47.0	47.1	47.6	47.6	47.3	47.4	46.8	47.5
Anesthesiology	45.4	45.6	46.4	46.3	45.3	45.8	45.5	45.4
Pathology	48.1	47.7	47.4	47.4	47.2	47.0	47.3	46.5
Census Division								
New England	46.6	47.4	47.0	46.8	46.1	46.2	46.7	46.7
Middle Atlantic	46.9	46.5	47.7	47.2	47.1	47.0	47.1	46.9
East North Central	46.6	47.0	47.2	47.2	46.9	47.1	46.7	46.5
West North Central	45.9	47.3	47.3	47.5	46.9	46.6	46.6	46.3
South Atlantic	47.0	47.2	47.9	48.0	47.5	47.4	47.5	47.2
East South Central	48.2	47.6	48.2	48.1	47.4	47.0	47.4	47.3
West South Central	47.6	47.7	48.2	48.0	47.5	47.9	47.4	47.7
Mountain	46.2	47.1	47.7	47.3	46.8	47.1	47.4	46.4
Pacific	46.8	47.1	47.4	47.2	47.0	47.1	47.0	46.5
Type of Practice								
Solo	47.7	47.7	48.2	48.1	48.1	47.9	48.0	48.0
Non-solo	46.2	46.6	47.2	47.1	46.5	46.7	46.5	46.3
Location								
Nonmetropolitan	47.5	47.6	48.3	48.1	47.4	47.4	47.4	47.3
Metropolitan—								
Less than 1,000,000	46.7	47.1	47.5	47.4	47.1	46.9	47.0	46.7
1,000,000 and over	46.9	47.0	47.5	47.4	47.0	47.2	47.1	46.9
Physician Age								
Less than 36 years	44.6	45.0	48.0	47.6	44.3	45.3	45.2	44.5
Less than 40 years	46.1	46.5	47.9	47.6	46.2	46.5	46.5	45.9
36-45 years	47.2	47.5	47.6	47.6	47.5	47.3	47.4	47.2
46-55 years	47.5	47.7	47.4	47.2	47.3	47.2	47.3	47.2
56-65 years	47.6	47.4	47.4	47.4	47.5	47.4	47.2	47.4
66 or more years	46.9	46.5	47.8	47.9	47.5	47.6	47.4	47.6

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 2 (continued). **Standard Error of the Mean Number of Weeks Practiced per Year, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	0.09	0.08	0.05	0.05	0.07	0.07	0.07	0.08
Specialty								
General/Family Practice	0.25	0.19	0.11	0.15	0.18	0.15	0.15	0.25
Internal Medicine	0.26	0.26	0.14	0.12	0.17	0.18	0.19	0.19
Surgery	0.18	0.17	0.10	0.12	0.14	0.13	0.13	0.18
Pediatrics	0.27	0.30	0.15	0.14	0.24	0.24	0.24	0.30
Obstetrics/Gynecology	0.30	0.37	0.15	0.26	0.27	0.28	0.23	0.23
Radiology	0.26	0.29	0.20	0.18	0.28	0.23	0.26	0.32
Psychiatry	0.29	0.23	0.12	0.15	0.26	0.19	0.27	0.15
Anesthesiology	0.34	0.26	0.21	0.19	0.33	0.28	0.29	0.30
Pathology	0.24	0.33	0.21	0.15	0.20	0.24	0.24	0.49
Census Division								
New England	0.30	0.27	0.23	0.25	0.40	0.33	0.24	0.24
Middle Atlantic	0.23	0.25	0.11	0.15	0.18	0.16	0.15	0.18
East North Central	0.20	0.20	0.14	0.13	0.17	0.14	0.19	0.20
West North Central	0.39	0.25	0.17	0.17	0.27	0.28	0.29	0.31
South Atlantic	0.23	0.21	0.11	0.11	0.15	0.14	0.14	0.17
East South Central	0.25	0.37	0.16	0.18	0.33	0.33	0.30	0.39
West South Central	0.23	0.24	0.14	0.13	0.23	0.16	0.22	0.21
Mountain	0.48	0.39	0.19	0.25	0.36	0.33	0.23	0.39
Pacific	0.22	0.19	0.13	0.15	0.19	0.17	0.18	0.22
Type of Practice								
Solo	0.12	0.12	0.08	0.08	0.08	0.10	0.09	0.11
Non-solo	0.13	0.11	0.06	0.07	0.10	0.08	0.09	0.10
Location								
Nonmetropolitan	0.26	0.24	0.13	0.13	0.23	0.24	0.22	0.26
Metropolitan—								
Less than 1,000,000	0.13	0.13	0.08	0.08	0.11	0.10	0.10	0.13
1,000,000 and over	0.13	0.12	0.07	0.08	0.11	0.09	0.10	0.11
Physician Age								
Less than 36 years	0.38	0.37	0.14	0.17	0.37	0.32	0.37	0.36
Less than 40 years	0.20	0.19	0.08	0.10	0.19	0.16	0.17	0.20
36-45 years	0.14	0.12	0.07	0.08	0.10	0.10	0.09	0.09
46-55 years	0.11	0.11	0.10	0.12	0.08	0.10	0.09	0.11
56-65 years	0.13	0.14	0.11	0.12	0.11	0.11	0.12	0.12
66 or more years	0.30	0.29	0.20	0.16	0.23	0.22	0.21	0.22

Table 3. **Mean Number of Hours in Professional Activities per Week, 1991**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	59.1	60.1	61.8	58.8	57.6	63.9	56.9	50.4	66.1	50.1
Census Division										
New England	57.8	·	60.6	59.2	53.8	·	·	55.1	·	·
Middle Atlantic	57.8	56.8	61.4	61.1	52.9	58.5	55.3	46.6	68.9	50.9
East North Central	59.2	62.0	58.2	62.6	58.2	62.8	57.1	48.7	65.2	·
West North Central	60.0	61.7	63.6	56.3	61.6	64.1	·	·	63.2	·
South Atlantic	60.6	61.2	65.2	56.1	60.2	67.9	64.1	50.6	69.5	50.1
East South Central	60.4	59.0	62.0	62.9	·	·	·	·	·	·
West South Central	61.1	63.4	66.2	55.7	63.4	72.3	54.4	59.6	·	·
Mountain	60.3	63.4	57.7	62.5	·	·	·	·	·	·
Pacific	56.8	55.6	60.9	56.8	56.4	61.8	56.4	46.3	63.2	·
Type of Practice										
Solo	61.3	63.0	65.7	58.8	62.2	66.6	·	52.8	63.8	·
Non-solo	57.9	57.7	59.8	58.9	55.9	62.4	56.7	48.4	66.5	50.2
Location										
Nonmetropolitan	61.8	62.1	66.3	60.9	·	70.3	·	·	·	·
Metropolitan—										
Less than 1,000,000	59.8	59.8	61.9	59.0	61.4	65.6	60.0	50.0	66.5	49.1
1,000,000 and over	58.0	59.2	61.2	58.3	55.1	61.1	54.7	50.9	65.9	51.3
Employment Status										
Self-employed	61.3	62.8	64.5	59.0	61.5	65.9	58.9	52.8	67.5	53.4
Non-self-employed[c]	54.5	53.8	55.6	58.1	51.5	59.0	55.1	47.0	64.3	47.6
Employee	53.9	53.1	54.9	58.3	51.3	58.5	53.2	47.2	62.2	50.0
Independent contractor	56.7	56.8	60.0	·	·	·	60.6	46.0	68.4	·
Physician Age										
Less than 36 years	60.4	60.6	61.5	61.0	57.6	65.1	55.5	47.4	70.8	·
Less than 40 years	60.1	61.2	62.1	58.1	55.5	66.0	56.9	53.1	68.2	52.6
36-45 years	59.8	60.7	62.3	58.8	56.7	63.9	59.0	54.2	67.0	50.4
46-55 years	60.6	64.6	63.1	60.6	59.4	66.2	58.1	50.6	64.6	49.5
56-65 years	57.2	59.2	61.2	56.4	58.1	62.3	54.5	48.5	63.5	50.2
66 or more years	50.9	50.9	54.3	54.6	·	·	·	42.6	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 3 (continued). **Standard Error of the Mean Number of Hours in Professional Activities per Week, 1991**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	0.28	0.78	0.68	0.62	0.89	1.11	1.14	0.88	1.11	1.08
Census Division										
New England	1.12	·	2.94	2.80	3.98	·	·	2.42	·	·
Middle Atlantic	0.72	2.54	1.57	1.90	2.02	2.65	2.84	1.42	3.34	1.79
East North Central	0.73	2.22	1.44	1.61	2.71	3.28	2.40	3.53	2.25	·
West North Central	1.00	2.16	3.21	1.96	3.48	4.10	·	·	1.98	·
South Atlantic	0.66	1.85	1.45	1.30	2.19	2.83	3.53	1.79	3.11	2.28
East South Central	1.14	1.97	3.32	2.18	·	·	·	·	·	·
West South Central	0.92	2.58	2.32	2.24	2.98	3.06	2.61	3.18	·	·
Mountain	1.14	2.33	3.99	2.73	·	·	·	·	·	·
Pacific	0.66	1.86	1.70	1.30	1.78	2.02	3.42	1.98	3.47	·
Type of Practice										
Solo	0.54	1.33	1.24	1.04	1.65	2.07	·	1.45	3.18	·
Non-solo	0.32	0.88	0.79	0.76	1.03	1.27	1.17	1.03	1.18	1.10
Location										
Nonmetropolitan	1.06	1.66	2.70	2.46	·	4.18	·	·	·	·
Metropolitan—										
Less than 1,000,000	0.41	1.09	1.03	0.92	1.39	1.63	1.65	1.09	1.56	1.43
1,000,000 and over	0.41	1.45	0.96	0.90	1.18	1.59	1.61	1.36	1.56	1.71
Employment Status										
Self-employed	0.35	0.95	0.78	0.69	1.07	1.33	1.31	1.20	1.49	1.34
Non-self-employed[c]	0.46	1.18	1.26	1.37	1.40	1.90	1.87	1.20	1.64	1.56
Employee	0.50	1.33	1.38	1.37	1.49	1.97	1.97	1.28	1.78	1.75
Independent contractor	1.08	2.59	2.71	·	·	·	4.39	3.23	3.31	·
Physician Age										
Less than 36 years	0.72	1.49	1.64	2.23	2.25	2.59	2.61	2.69	2.31	·
Less than 40 years	0.50	1.11	1.18	1.17	1.67	1.95	1.87	2.65	1.69	2.35
36-45 years	0.45	1.07	1.09	0.98	1.44	1.82	2.07	1.91	1.70	1.66
46-55 years	0.55	2.48	1.27	1.11	1.59	2.15	2.01	1.41	2.13	2.18
56-65 years	0.70	1.90	2.01	1.41	2.59	2.34	2.32	1.77	3.83	2.48
66 or more years	1.18	2.55	2.66	3.18	·	·	·	1.93	·	·

Table 4. **Mean Number of Hours in Professional Activities per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	57.5	57.1	57.7	58.3	58.2	58.8	58.8	59.1
Specialty								
General/Family Practice	57.8	58.6	57.9	58.2	58.3	58.8	59.7	60.1
Internal Medicine	59.7	58.7	60.1	61.3	61.4	62.6	61.2	61.8
Surgery	57.4	56.8	58.1	58.2	59.2	58.5	58.7	58.8
Pediatrics	56.9	56.3	58.3	59.8	57.3	58.0	57.5	57.6
Obstetrics/Gynecology	60.7	61.5	62.9	60.9	63.4	64.0	64.5	63.9
Radiology	56.1	56.2	55.9	57.2	57.1	58.8	57.2	56.9
Psychiatry	51.6	51.1	49.2	50.4	49.0	50.3	50.7	50.4
Anesthesiology	60.2	58.5	59.4	58.8	58.8	61.8	64.0	66.1
Pathology	50.8	51.3	50.4	52.9	50.2	52.1	53.0	50.1
Census Division								
New England	56.1	55.7	58.0	58.3	56.0	56.0	55.6	57.8
Middle Atlantic	56.7	56.5	56.8	55.2	56.3	58.0	56.5	57.8
East North Central	58.0	56.5	57.7	58.4	57.6	57.6	58.9	59.2
West North Central	56.6	57.5	57.5	60.3	57.7	62.1	60.8	60.0
South Atlantic	57.9	57.2	58.2	60.2	60.4	60.3	60.9	60.6
East South Central	61.6	61.4	58.2	60.6	62.1	60.1	62.8	60.4
West South Central	59.6	60.1	59.2	61.9	58.7	60.7	61.3	61.1
Mountain	58.2	56.2	57.8	59.1	60.4	58.9	57.7	60.3
Pacific	55.2	55.5	56.8	55.5	57.1	57.6	56.9	56.8
Type of Practice								
Solo	57.4	57.4	57.7	59.0	59.0	59.0	59.1	61.3
Non-solo	57.5	56.8	57.6	57.9	57.7	58.7	58.7	57.9
Location								
Nonmetropolitan	60.2	59.1	60.5	62.3	61.0	62.6	62.3	61.8
Metropolitan—								
Less than 1,000,000	58.1	57.5	58.0	59.6	58.7	59.2	59.2	59.8
1,000,000 and over	56.4	56.3	56.8	56.4	57.2	57.7	57.8	58.0
Physician Age								
Less than 36 years	60.6	58.0	60.1	60.5	59.8	59.5	60.2	60.4
Less than 40 years	59.3	57.9	59.3	60.6	60.2	60.1	60.4	60.1
36-45 years	58.7	58.0	58.9	60.2	60.3	60.5	60.6	59.8
46-55 years	58.1	58.0	57.6	59.1	58.4	59.8	59.3	60.6
56-65 years	55.9	56.9	56.5	56.1	56.9	56.6	56.9	57.2
66 or more years	48.9	48.7	51.4	49.3	49.7	52.6	51.0	50.9

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 4 (continued). **Standard Error of the Mean Number of Hours in Professional Activities per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.28	0.26	0.28	0.28	0.27	0.27	0.28	0.28
Specialty								
General/Family Practice	0.73	0.68	0.75	0.74	0.68	0.68	0.72	0.78
Internal Medicine	0.73	0.74	0.71	0.72	0.68	0.68	0.71	0.68
Surgery	0.61	0.58	0.67	0.57	0.62	0.58	0.55	0.62
Pediatrics	1.00	0.95	1.00	1.04	0.90	0.84	1.05	0.89
Obstetrics/Gynecology	1.03	1.10	1.12	1.07	1.00	1.12	1.23	1.11
Radiology	0.96	0.85	0.89	1.02	0.84	0.97	1.07	1.14
Psychiatry	0.90	0.83	0.87	0.91	0.87	0.95	0.96	0.88
Anesthesiology	1.21	0.88	1.10	1.09	1.16	1.34	1.04	1.11
Pathology	1.18	1.02	1.05	0.84	0.98	1.14	1.21	1.08
Census Division								
New England	1.11	1.06	1.06	1.15	1.02	1.04	1.11	1.12
Middle Atlantic	0.72	0.66	0.71	0.68	0.69	0.69	0.69	0.72
East North Central	0.74	0.67	0.71	0.68	0.62	0.64	0.67	0.73
West North Central	1.07	0.98	1.01	0.99	0.92	1.11	1.13	1.00
South Atlantic	0.65	0.60	0.72	0.71	0.67	0.64	0.68	0.66
East South Central	1.23	1.20	1.31	1.20	1.36	1.06	1.24	1.14
West South Central	0.81	0.88	0.84	1.03	0.89	0.93	0.86	0.92
Mountain	1.33	1.06	1.15	1.02	1.20	1.23	1.41	1.14
Pacific	0.69	0.61	0.69	0.64	0.69	0.70	0.64	0.66
Type of Practice								
Solo	0.44	0.43	0.46	0.48	0.49	0.49	0.49	0.54
Non-solo	0.37	0.32	0.36	0.35	0.33	0.33	0.34	0.32
Location								
Nonmetropolitan	0.87	0.79	0.94	0.91	0.93	0.96	0.88	1.06
Metropolitan—								
Less than 1,000,000	0.43	0.41	0.43	0.44	0.42	0.41	0.42	0.41
1,000,000 and over	0.41	0.38	0.41	0.39	0.39	0.39	0.41	0.41
Physician Age								
Less than 36 years	0.83	0.74	0.86	0.86	0.76	0.76	0.87	0.72
Less than 40 years	0.50	0.46	0.49	0.52	0.50	0.50	0.52	0.50
36-45 years	0.49	0.43	0.44	0.49	0.47	0.46	0.44	0.45
46-55 years	0.57	0.54	0.56	0.56	0.54	0.52	0.57	0.55
56-65 years	0.59	0.58	0.69	0.59	0.61	0.63	0.62	0.70
66 or more years	0.92	0.88	0.97	0.85	0.90	1.00	1.01	1.18

Table 5. **Mean Number of Hours in Patient Care Activities per Week, 1991**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	53.3	54.7	56.3	53.4	52.4	59.5	53.3	43.2	58.6	41.6
Census Division										
New England	51.3	·	53.9	53.1	48.4	·	·	47.9	·	·
Middle Atlantic	51.6	51.0	55.3	55.6	46.8	54.8	52.9	39.4	61.6	39.9
East North Central	52.7	54.4	52.6	56.7	53.0	58.2	51.1	42.0	55.7	·
West North Central	55.2	57.1	61.0	51.2	55.2	59.9	·	·	58.1	·
South Atlantic	55.1	55.5	59.8	51.8	56.4	62.8	61.5	41.3	61.8	41.9
East South Central	55.6	55.7	56.9	57.8	·	·	·	·	·	·
West South Central	55.9	59.5	61.1	50.7	56.6	66.9	50.6	54.1	·	·
Mountain	54.7	60.1	51.2	56.4	·	·	·	·	·	·
Pacific	51.2	49.9	55.2	50.5	52.8	57.8	52.7	39.6	57.2	·
Type of Practice										
Solo	55.4	56.8	59.4	53.1	56.5	62.5	·	46.7	56.7	·
Non-solo	52.3	53.0	54.7	53.6	50.9	57.9	53.2	40.3	58.9	41.3
Location										
Nonmetropolitan	57.5	58.7	61.4	56.1	·	66.2	·	·	·	·
Metropolitan—										
Less than 1,000,000	54.2	54.3	56.7	54.5	55.6	61.6	56.7	42.7	59.7	41.5
1,000,000 and over	51.8	52.4	55.3	51.8	50.2	56.4	50.9	43.8	57.4	41.9
Employment Status										
Self-employed	55.9	57.1	58.9	53.8	56.5	61.7	55.7	46.1	61.2	46.3
Non-self-employed[c]	48.2	48.9	50.2	51.1	45.9	54.3	51.2	39.0	55.2	37.8
Employee	47.4	48.4	49.1	51.3	45.8	53.9	48.9	39.2	50.8	39.2
Independent contractor	51.2	51.0	56.9	·	·	·	58.2	38.4	65.5	·
Physician Age										
Less than 36 years	55.1	55.5	57.2	55.2	53.2	60.7	52.2	40.7	62.2	·
Less than 40 years	54.4	55.3	57.1	53.4	51.0	61.3	54.2	45.5	59.0	44.1
36-45 years	53.8	55.1	56.7	53.6	51.8	59.5	54.9	45.8	57.7	40.7
46-55 years	54.5	58.5	57.1	54.5	55.3	61.6	53.6	42.9	59.5	39.8
56-65 years	52.1	55.3	54.8	51.8	52.2	58.1	51.8	42.6	56.4	43.8
66 or more years	45.4	43.6	49.0	49.4	·	·	·	38.0	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 5 (continued). **Standard Error of the Mean Number of Hours in Patient Care Activities per Week, 1991**[a]

		Specialty								
	All Physicians[b]	GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	0.27	0.74	0.66	0.58	0.86	1.08	1.08	0.85	1.24	1.12
Census Division										
New England	1.12	·	2.83	2.70	3.95	·	·	2.33	·	·
Middle Atlantic	0.71	2.42	1.47	1.81	1.92	2.73	2.70	1.43	3.55	1.99
East North Central	0.71	2.06	1.38	1.54	2.61	3.00	2.31	3.24	2.85	·
West North Central	0.95	2.02	2.97	1.78	3.11	3.98	·	·	2.03	·
South Atlantic	0.64	1.79	1.43	1.17	1.93	2.73	3.12	1.68	3.28	1.98
East South Central	1.16	1.99	3.48	2.07	·	·	·	·	·	·
West South Central	0.88	2.32	2.28	1.96	3.16	3.08	2.48	3.18	·	·
Mountain	1.16	2.25	3.38	2.65	·	·	·	·	·	·
Pacific	0.65	1.74	1.70	1.18	1.74	2.13	3.33	1.86	3.76	·
Type of Practice										
Solo	0.51	1.21	1.20	0.94	1.63	1.97	·	1.32	3.46	·
Non-solo	0.32	0.89	0.77	0.73	0.99	1.27	1.10	1.06	1.33	1.14
Location										
Nonmetropolitan	1.05	1.56	2.86	2.39	·	4.09	·	·	·	·
Metropolitan—										
Less than 1,000,000	0.40	1.04	1.01	0.82	1.41	1.63	1.62	1.05	1.73	1.58
1,000,000 and over	0.39	1.35	0.91	0.86	1.10	1.50	1.47	1.31	1.80	1.70
Employment Status										
Self-employed	0.33	0.87	0.76	0.64	1.02	1.27	1.35	1.14	1.58	1.51
Non-self-employed[c]	0.45	1.28	1.18	1.33	1.33	1.95	1.65	1.20	1.95	1.49
Employee	0.50	1.45	1.30	1.36	1.42	2.10	1.64	1.26	2.47	1.64
Independent contractor	1.03	2.72	2.49	·	·	·	4.17	3.32	2.72	·
Physician Age										
Less than 36 years	0.71	1.34	1.64	2.22	2.19	2.60	2.54	2.25	2.85	·
Less than 40 years	0.50	1.08	1.17	1.13	1.62	1.87	1.89	2.66	2.00	2.89
36-45 years	0.45	1.07	1.10	0.88	1.39	1.82	1.94	1.98	2.11	1.75
46-55 years	0.53	2.39	1.11	1.00	1.55	2.01	1.97	1.31	2.09	2.30
56-65 years	0.68	1.81	1.82	1.35	2.32	2.45	2.51	1.70	3.74	2.32
66 or more years	1.10	1.99	2.70	3.23	·	·	·	1.69	·	·

Table 6. **Mean Number of Hours in Patient Care Activities per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	51.5	51.3	52.2	52.9	53.1	53.3	53.3	53.3
Specialty								
General/Family Practice	53.3	53.6	53.3	53.7	54.4	54.4	55.0	54.7
Internal Medicine	53.0	52.4	54.0	56.0	56.2	56.8	55.7	56.3
Surgery	51.5	51.2	52.6	53.0	53.8	53.3	53.1	53.4
Pediatrics	51.1	50.6	52.4	53.6	52.5	53.4	52.4	52.4
Obstetrics/Gynecology	55.7	56.9	59.0	57.0	59.4	59.0	60.4	59.5
Radiology	50.5	51.5	51.6	51.4	52.3	53.9	53.3	53.3
Psychiatry	45.2	45.1	43.0	43.9	43.3	43.7	43.6	43.2
Anesthesiology	54.9	53.5	55.0	54.0	52.5	56.7	58.3	58.6
Pathology	41.2	41.5	44.0	43.6	42.4	42.6	44.3	41.6
Census Division								
New England	49.3	49.4	51.4	51.7	50.3	50.1	48.9	51.3
Middle Atlantic	50.4	49.8	50.9	49.8	50.6	52.1	50.8	51.6
East North Central	51.5	50.8	52.4	52.7	52.9	52.2	53.2	52.7
West North Central	50.9	51.9	52.3	55.0	53.2	56.5	55.9	55.2
South Atlantic	52.3	51.6	52.6	55.1	55.4	55.1	55.3	55.1
East South Central	56.3	56.5	52.9	55.5	57.5	55.8	58.5	55.6
West South Central	54.4	54.5	54.4	56.1	53.9	55.9	56.0	55.9
Mountain	52.7	51.3	52.3	53.6	54.9	54.1	52.6	54.7
Pacific	49.0	49.9	51.5	50.2	51.5	51.5	51.5	51.2
Type of Practice								
Solo	51.9	52.1	52.5	53.9	54.1	53.7	53.7	55.4
Non-solo	51.1	50.6	51.9	52.2	52.4	53.1	53.1	52.3
Location								
Nonmetropolitan	56.4	54.5	55.8	58.1	57.2	58.4	58.1	57.5
Metropolitan—								
Less than 1,000,000	52.1	52.0	53.0	54.2	53.7	54.5	54.0	54.2
1,000,000 and over	49.9	50.0	50.7	50.6	51.7	51.3	51.8	51.8
Physician Age								
Less than 36 years	54.1	52.0	55.0	55.4	54.9	54.4	55.1	55.1
Less than 40 years	53.1	51.8	53.9	55.1	54.8	54.3	54.7	54.4
36-45 years	52.4	52.2	53.0	54.4	54.9	54.9	54.9	53.8
46-55 years	52.0	52.1	52.2	53.6	53.1	54.1	53.9	54.5
56-65 years	50.4	51.2	50.9	50.5	52.2	51.6	51.3	52.1
66 or more years	44.1	44.0	47.0	45.3	44.7	47.2	46.1	45.4

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 6 (continued). **Standard Error of the Mean Number of Hours in Patient Care Activities per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.28	0.26	0.28	0.28	0.27	0.27	0.27	0.27
Specialty								
General/Family Practice	0.70	0.66	0.72	0.71	0.66	0.67	0.69	0.74
Internal Medicine	0.75	0.74	0.72	0.72	0.68	0.68	0.69	0.66
Surgery	0.59	0.56	0.66	0.58	0.58	0.58	0.52	0.58
Pediatrics	1.03	0.94	1.00	1.05	0.89	0.83	1.02	0.86
Obstetrics/Gynecology	1.00	1.05	1.14	1.01	0.98	1.15	1.18	1.08
Radiology	0.88	0.82	0.83	0.96	0.83	0.92	1.03	1.08
Psychiatry	0.84	0.82	0.84	0.87	0.84	0.94	0.97	0.85
Anesthesiology	1.26	0.95	1.13	1.12	1.19	1.31	1.13	1.24
Pathology	1.17	1.07	1.21	0.95	1.08	1.21	1.26	1.12
Census Division								
New England	1.12	1.08	1.06	1.07	0.96	1.08	1.16	1.12
Middle Atlantic	0.73	0.67	0.70	0.68	0.68	0.68	0.67	0.71
East North Central	0.69	0.65	0.72	0.67	0.62	0.64	0.66	0.71
West North Central	1.07	0.96	1.01	1.00	0.92	1.14	1.11	0.95
South Atlantic	0.66	0.61	0.74	0.72	0.66	0.64	0.65	0.64
East South Central	1.19	1.21	1.28	1.23	1.31	1.05	1.21	1.16
West South Central	0.81	0.88	0.84	1.02	0.87	0.91	0.85	0.88
Mountain	1.31	1.04	1.16	1.01	1.20	1.22	1.37	1.16
Pacific	0.68	0.61	0.66	0.63	0.67	0.71	0.63	0.65
Type of Practice								
Solo	0.42	0.42	0.45	0.46	0.47	0.47	0.47	0.51
Non-solo	0.37	0.33	0.36	0.35	0.33	0.34	0.34	0.32
Location								
Nonmetropolitan	0.84	0.78	0.92	0.91	0.89	0.94	0.86	1.05
Metropolitan—								
Less than 1,000,000	0.43	0.41	0.43	0.44	0.42	0.41	0.41	0.40
1,000,000 and over	0.41	0.38	0.41	0.39	0.38	0.40	0.40	0.39
Physician Age								
Less than 36 years	0.84	0.75	0.85	0.84	0.77	0.77	0.85	0.71
Less than 40 years	0.51	0.47	0.50	0.53	0.50	0.51	0.52	0.50
36-45 years	0.49	0.44	0.45	0.49	0.46	0.47	0.44	0.45
46-55 years	0.57	0.53	0.55	0.56	0.53	0.52	0.54	0.53
56-65 years	0.57	0.57	0.68	0.58	0.59	0.62	0.62	0.68
66 or more years	0.86	0.86	0.98	0.83	0.83	0.94	0.98	1.10

Table 7. **Mean Number of Hours in Direct Patient Care Activities per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	49.1	49.7	49.7	49.6	46.0	54.9
Census Division						
New England	46.3	·	47.6	49.1	42.0	·
Middle Atlantic	47.0	45.0	49.1	51.1	41.1	50.3
East North Central	48.9	50.0	46.3	53.1	46.7	53.6
West North Central	50.3	52.1	53.2	47.6	47.6	55.8
South Atlantic	50.8	49.6	53.1	48.2	49.4	58.6
East South Central	51.2	51.4	50.4	53.3	·	·
West South Central	51.8	55.3	54.1	47.5	48.3	60.6
Mountain	50.8	54.5	46.7	52.6	·	·
Pacific	47.1	45.4	48.4	46.9	47.1	54.1
Type of Practice						
Solo	51.0	51.8	52.3	49.3	49.6	57.6
Non-solo	47.9	48.0	48.4	49.9	44.6	53.4
Location						
Nonmetropolitan	54.1	54.3	55.4	52.7	·	62.0
Metropolitan—						
Less than 1,000,000	50.0	49.2	50.4	50.8	48.6	56.9
1,000,000 and over	47.1	47.0	48.5	47.9	44.1	51.7
Employment Status						
Self-employed	51.2	51.9	52.1	50.1	49.9	57.1
Non-self-employed[c]	44.0	44.5	44.3	47.2	39.8	49.6
Employee	43.3	44.0	43.2	47.5	39.7	49.5
Independent contractor	46.6	46.6	51.3	·	·	·
Physician Age						
Less than 36 years	49.7	50.4	50.8	51.2	45.3	55.7
Less than 40 years	49.4	50.3	50.6	50.0	43.3	56.9
36-45 years	49.4	50.3	50.3	50.1	45.2	55.2
46-55 years	50.5	52.3	50.8	50.5	47.6	56.6
56-65 years	48.2	51.0	46.6	48.0	46.7	53.4
66 or more years	42.0	39.3	44.2	45.1	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 7 (continued). **Standard Error of the Mean Number of Hours in Direct Patient Care Activities per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.29	0.70	0.62	0.54	0.79	1.04
Census Division						
New England	1.29	·	2.47	2.62	3.44	·
Middle Atlantic	0.75	2.03	1.32	1.70	1.88	2.60
East North Central	0.76	2.02	1.27	1.47	2.51	2.97
West North Central	1.06	2.00	3.03	1.68	2.75	3.70
South Atlantic	0.65	1.62	1.39	1.09	1.87	2.56
East South Central	1.21	1.88	3.34	1.91	·	·
West South Central	0.99	2.26	2.28	1.84	2.63	2.97
Mountain	1.17	2.11	3.20	2.56	·	·
Pacific	0.64	1.61	1.62	1.10	1.49	2.02
Type of Practice						
Solo	0.52	1.17	1.13	0.88	1.42	1.91
Non-solo	0.34	0.81	0.73	0.69	0.93	1.20
Location						
Nonmetropolitan	1.05	1.53	2.56	2.37	·	3.97
Metropolitan—						
Less than 1,000,000	0.44	0.97	0.98	0.78	1.35	1.55
1,000,000 and over	0.41	1.23	0.84	0.78	0.98	1.43
Employment Status						
Self-employed	0.34	0.83	0.72	0.60	0.94	1.22
Non-self-employed[c]	0.50	1.17	1.13	1.30	1.20	1.86
Employee	0.56	1.30	1.23	1.31	1.28	2.03
Independent contractor	1.13	2.67	2.37	·	·	·
Physician Age						
Less than 36 years	0.75	1.29	1.51	2.10	2.12	2.62
Less than 40 years	0.52	1.04	1.11	1.07	1.48	1.81
36-45 years	0.46	1.01	1.04	0.83	1.26	1.70
46-55 years	0.59	2.23	1.08	0.96	1.41	1.97
56-65 years	0.73	1.77	1.66	1.26	2.17	2.22
66 or more years	1.22	1.82	2.49	2.99	·	·

Table 8. **Mean Number of Hours in Direct Patient Care Activities per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	47.6	47.4	48.5	49.3	49.5	49.3	49.1	49.1
Specialty								
General/Family Practice	49.1	49.0	48.9	49.1	49.8	49.8	49.9	49.7
Internal Medicine	47.2	46.7	48.2	50.2	50.2	50.6	49.5	49.7
Surgery	48.1	48.0	49.2	49.6	50.2	49.3	49.5	49.6
Pediatrics	45.0	44.6	46.0	47.2	46.5	47.4	46.0	46.0
Obstetrics/Gynecology	50.8	52.6	54.4	53.0	55.2	54.6	55.5	54.9
Census Division								
New England	45.2	44.6	46.3	47.3	45.8	45.0	44.2	46.3
Middle Atlantic	46.3	45.6	46.2	45.5	46.6	48.0	46.7	47.0
East North Central	46.6	46.2	49.0	49.4	49.6	48.3	49.0	48.9
West North Central	47.8	47.4	48.0	51.9	49.2	52.4	50.6	50.3
South Atlantic	48.7	47.9	49.2	51.4	51.6	50.7	50.8	50.8
East South Central	52.9	52.9	50.3	52.2	54.0	52.5	54.8	51.2
West South Central	51.1	50.7	50.9	53.2	50.1	52.1	51.3	51.8
Mountain	48.7	48.2	48.6	50.3	53.2	50.6	48.7	50.8
Pacific	45.2	46.4	48.0	46.7	48.2	47.8	47.4	47.1
Type of Practice								
Solo	47.9	48.3	48.8	50.3	50.5	49.5	49.4	51.0
Non-solo	47.4	46.5	48.1	48.6	48.8	49.2	48.9	47.9
Location								
Nonmetropolitan	53.8	51.4	52.9	54.8	54.0	55.5	54.5	54.1
Metropolitan—								
Less than 1,000,000	48.4	48.2	49.3	50.7	50.2	50.2	49.7	50.0
1,000,000 and over	45.5	45.7	46.6	46.8	47.8	47.1	47.2	47.1
Physician Age								
Less than 36 years	50.3	47.7	51.2	51.8	50.8	49.9	50.2	49.7
Less than 40 years	49.3	47.9	50.0	51.3	50.5	49.8	50.3	49.4
36-45 years	48.6	48.4	49.2	50.9	51.0	50.7	50.4	49.4
46-55 years	48.5	48.1	48.4	49.9	50.0	50.6	49.8	50.5
56-65 years	46.3	47.2	47.4	46.9	49.0	47.7	47.4	48.2
66 or more years	39.8	40.5	43.4	42.0	41.0	42.7	41.9	42.0

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 8 (continued). **Standard Error of the Mean Number of Hours in Direct Patient Care Activities per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.31	0.29	0.31	0.31	0.29	0.29	0.29	0.29
Specialty								
General/Family Practice	0.66	0.60	0.67	0.65	0.63	0.64	0.64	0.70
Internal Medicine	0.71	0.69	0.68	0.67	0.64	0.64	0.63	0.62
Surgery	0.56	0.53	0.61	0.55	0.54	0.54	0.50	0.54
Pediatrics	0.96	0.85	0.88	0.96	0.81	0.78	0.94	0.79
Obstetrics/Gynecology	0.91	0.98	1.06	0.98	0.95	1.10	1.11	1.04
Census Division								
New England	1.36	1.23	1.19	1.15	1.13	1.09	1.31	1.29
Middle Atlantic	0.84	0.75	0.77	0.74	0.75	0.74	0.72	0.75
East North Central	0.77	0.73	0.80	0.76	0.70	0.68	0.69	0.76
West North Central	1.09	1.10	1.17	1.09	0.93	1.16	1.10	1.06
South Atlantic	0.75	0.65	0.82	0.76	0.70	0.69	0.67	0.65
East South Central	1.19	1.29	1.35	1.40	1.45	1.15	1.26	1.21
West South Central	0.86	0.92	0.88	1.09	0.86	0.97	0.91	0.99
Mountain	1.35	1.13	1.24	1.14	1.35	1.24	1.31	1.17
Pacific	0.73	0.67	0.71	0.65	0.71	0.73	0.66	0.64
Type of Practice								
Solo	0.45	0.44	0.46	0.48	0.48	0.47	0.47	0.52
Non-solo	0.43	0.38	0.42	0.40	0.37	0.37	0.37	0.34
Location								
Nonmetropolitan	0.82	0.81	0.93	0.91	0.91	0.96	0.89	1.05
Metropolitan—								
Less than 1,000,000	0.46	0.44	0.46	0.49	0.45	0.42	0.43	0.44
1,000,000 and over	0.47	0.42	0.46	0.42	0.42	0.43	0.43	0.41
Physician Age								
Less than 36 years	0.86	0.79	0.94	0.87	0.82	0.83	0.89	0.75
Less than 40 years	0.55	0.50	0.55	0.55	0.53	0.52	0.55	0.52
36-45 years	0.56	0.48	0.49	0.53	0.49	0.48	0.47	0.46
46-55 years	0.64	0.61	0.62	0.63	0.60	0.59	0.57	0.59
56-65 years	0.62	0.64	0.77	0.65	0.65	0.67	0.65	0.73
66 or more years	0.90	0.89	0.99	0.89	0.85	0.96	1.02	1.22

Table 9. **Mean Number of Office Hours per Week, 1991**[a]

	All Physicians[b]	Specialty				
		General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	26.8	35.1	26.7	23.0	31.9	27.9
Census Division						
New England	27.3	·	27.6	25.3	33.7	·
Middle Atlantic	24.4	31.8	25.4	21.0	27.5	24.7
East North Central	25.0	34.3	25.5	21.6	31.3	23.5
West North Central	26.2	35.3	24.3	22.5	24.7	27.8
South Atlantic	28.2	36.6	28.8	22.0	35.0	31.0
East South Central	27.7	37.5	24.1	24.7	·	·
West South Central	28.4	37.7	26.5	22.9	36.3	31.3
Mountain	27.1	37.8	26.2	22.8	·	·
Pacific	28.3	31.7	28.7	25.7	35.7	31.6
Type of Practice						
Solo	30.7	37.8	29.5	24.8	39.2	30.2
Non-solo	24.5	32.8	25.3	21.7	29.3	26.6
Location						
Nonmetropolitan	29.2	34.5	27.3	23.0	·	31.3
Metropolitan—						
Less than 1,000,000	26.8	35.4	26.9	23.1	31.5	28.7
1,000,000 and over	26.4	35.0	26.5	23.0	31.9	26.6
Employment Status						
Self-employed	29.2	37.1	28.6	23.7	38.3	29.5
Non-self-employed[c]	21.3	30.1	22.3	19.4	22.0	24.2
Employee	22.2	30.2	21.4	19.4	22.7	24.1
Independent contractor	17.7	29.8	28.3	·	·	·
Physician Age						
Less than 36 years	26.6	35.6	25.4	22.8	29.7	28.2
Less than 40 years	25.6	34.9	25.2	22.6	29.6	28.5
36-45 years	26.2	36.0	26.5	21.8	30.8	28.4
46-55 years	27.2	34.4	27.9	23.3	33.0	28.5
56-65 years	27.2	35.4	26.8	23.1	34.3	25.7
66 or more years	28.8	31.8	26.7	27.7	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 9 (continued). **Standard Error of the Mean Number of Office Hours per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.26	0.54	0.53	0.41	0.87	0.63
Census Division						
New England	1.16	·	2.20	1.67	3.10	·
Middle Atlantic	0.65	1.68	1.19	1.01	2.27	1.79
East North Central	0.66	1.41	1.23	1.09	2.43	1.57
West North Central	0.97	1.33	2.17	1.94	3.05	1.95
South Atlantic	0.64	1.35	1.24	0.93	1.92	1.31
East South Central	1.08	1.97	2.18	1.61	·	·
West South Central	0.87	1.44	1.87	1.29	3.01	1.94
Mountain	1.16	1.11	3.35	1.84	·	·
Pacific	0.61	1.48	1.23	0.94	1.63	1.48
Type of Practice						
Solo	0.38	0.70	0.79	0.62	1.08	0.93
Non-solo	0.34	0.77	0.68	0.55	1.06	0.82
Location						
Nonmetropolitan	0.79	0.95	1.62	1.67	·	2.11
Metropolitan—						
Less than 1,000,000	0.40	0.87	0.83	0.59	1.47	0.84
1,000,000 and over	0.39	0.96	0.74	0.62	1.13	1.00
Employment Status						
Self-employed	0.28	0.53	0.54	0.43	0.81	0.63
Non-self-employed[c]	0.55	1.25	1.18	1.17	1.46	1.45
Employee	0.60	1.42	1.26	1.23	1.55	1.60
Independent contractor	1.31	2.70	3.18	·	·	·
Physician Age						
Less than 36 years	0.71	1.13	1.21	1.58	2.11	1.80
Less than 40 years	0.49	0.85	0.91	0.87	1.49	1.13
36-45 years	0.44	0.85	0.87	0.61	1.32	0.96
46-55 years	0.52	1.65	1.12	0.71	1.81	1.11
56-65 years	0.68	1.30	1.26	1.10	2.59	1.74
66 or more years	0.86	1.40	1.77	1.81	·	·

Table 10. **Mean Number of Office Hours per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	24.9	25.3	26.2	26.8	26.7	26.9	27.1	26.8
Specialty								
General/Family Practice	32.4	32.9	33.9	34.2	34.3	34.8	35.1	35.1
Internal Medicine	24.2	24.8	25.8	27.0	27.3	26.8	27.1	26.7
Surgery	21.2	21.9	22.1	23.2	22.0	22.7	23.2	23.0
Pediatrics	29.4	29.1	31.4	30.8	31.3	31.8	31.9	31.9
Obstetrics/Gynecology	25.9	28.4	28.1	28.1	29.3	29.2	29.2	27.9
Census Division								
New England	24.2	23.7	25.0	26.2	26.0	23.3	24.8	27.3
Middle Atlantic	22.8	23.5	24.3	23.8	23.8	25.6	24.4	24.4
East North Central	22.7	23.9	24.5	25.0	25.7	25.2	26.7	25.0
West North Central	24.9	26.1	27.0	27.8	27.2	28.7	27.8	26.2
South Atlantic	26.2	26.3	26.4	27.7	28.1	27.7	28.8	28.2
East South Central	28.7	28.6	27.6	28.2	28.2	27.2	28.4	27.7
West South Central	26.3	26.6	28.4	30.6	29.2	29.5	27.9	28.4
Mountain	26.5	25.5	27.1	27.4	27.5	27.7	27.1	27.1
Pacific	25.3	26.0	27.9	27.2	27.2	27.9	27.9	28.3
Type of Practice								
Solo	27.0	28.0	28.6	29.9	29.5	30.2	30.3	30.7
Non-solo	23.0	23.0	24.4	24.5	24.8	24.6	25.0	24.5
Location								
Nonmetropolitan	29.8	28.9	30.2	30.8	30.7	30.9	31.7	29.2
Metropolitan—								
Less than 1,000,000	24.9	25.6	26.4	27.1	26.6	26.5	26.5	26.8
1,000,000 and over	23.8	24.3	25.2	25.6	26.0	26.3	26.5	26.4
Physician Age								
Less than 36 years	24.9	22.9	26.5	25.7	26.4	27.2	27.5	26.6
Less than 40 years	23.7	23.5	25.4	26.0	25.7	25.7	26.4	25.6
36-45 years	23.1	24.1	25.1	26.0	25.8	26.1	26.4	26.2
46-55 years	26.0	25.9	26.4	26.9	26.5	26.6	26.2	27.2
56-65 years	27.2	27.9	28.3	28.9	28.7	28.2	29.2	27.2
66 or more years	24.6	26.6	26.2	26.6	27.2	27.8	27.9	28.8

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 10 (continued). **Standard Error of the Mean Number of Office Hours per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.26	0.26	0.26	0.27	0.26	0.26	0.27	0.26
Specialty								
General/Family Practice	0.46	0.45	0.48	0.51	0.49	0.48	0.54	0.54
Internal Medicine	0.57	0.61	0.57	0.51	0.52	0.53	0.54	0.53
Surgery	0.41	0.44	0.42	0.44	0.41	0.41	0.40	0.41
Pediatrics	0.83	0.85	0.87	0.98	0.88	0.85	0.95	0.87
Obstetrics/Gynecology	0.60	0.59	0.64	0.55	0.60	0.70	0.73	0.63
Census Division								
New England	1.19	1.23	1.13	1.09	1.06	0.97	1.16	1.16
Middle Atlantic	0.67	0.63	0.64	0.64	0.62	0.63	0.66	0.65
East North Central	0.61	0.64	0.66	0.67	0.64	0.61	0.65	0.66
West North Central	0.93	0.95	1.00	0.88	0.87	1.06	1.06	0.97
South Atlantic	0.60	0.60	0.67	0.66	0.62	0.63	0.64	0.64
East South Central	1.09	1.21	1.08	1.12	1.14	1.12	1.09	1.08
West South Central	0.79	0.83	0.80	0.85	0.78	0.76	0.83	0.87
Mountain	1.23	1.22	1.11	1.15	1.19	1.23	1.27	1.16
Pacific	0.63	0.66	0.63	0.64	0.73	0.67	0.65	0.61
Type of Practice								
Solo	0.33	0.34	0.35	0.36	0.36	0.35	0.37	0.38
Non-solo	0.39	0.38	0.38	0.37	0.36	0.35	0.36	0.34
Location								
Nonmetropolitan	0.64	0.66	0.69	0.69	0.78	0.80	0.78	0.79
Metropolitan—								
Less than 1,000,000	0.40	0.42	0.41	0.41	0.39	0.38	0.40	0.40
1,000,000 and over	0.39	0.38	0.39	0.39	0.39	0.39	0.40	0.39
Physician Age								
Less than 36 years	0.81	0.80	0.86	0.87	0.76	0.79	0.93	0.71
Less than 40 years	0.49	0.48	0.49	0.51	0.50	0.50	0.54	0.49
36-45 years	0.47	0.45	0.43	0.46	0.46	0.44	0.44	0.44
46-55 years	0.54	0.53	0.53	0.56	0.53	0.53	0.53	0.52
56-65 years	0.51	0.60	0.62	0.56	0.58	0.54	0.60	0.68
66 or more years	0.66	0.65	0.75	0.70	0.70	0.79	0.87	0.86

Table 11. **Mean Number of Hours on Hospital Rounds per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	8.7	6.5	14.8	6.5	9.0	5.6
Census Division						
New England	7.5	•	12.1	5.4	4.2	•
Middle Atlantic	10.0	6.5	14.6	8.4	8.1	5.6
East North Central	9.0	7.5	13.8	7.2	13.5	5.4
West North Central	8.6	6.4	17.1	4.6	16.2	6.7
South Atlantic	9.3	7.0	16.0	6.7	7.8	5.5
East South Central	10.3	7.0	19.8	7.5	•	•
West South Central	8.6	7.0	18.6	6.1	7.1	6.2
Mountain	8.0	6.3	13.5	7.7	•	•
Pacific	6.8	4.8	12.1	5.1	7.2	5.0
Type of Practice						
Solo	8.7	6.4	15.2	6.2	6.7	5.9
Non-solo	8.7	6.6	14.6	6.8	9.9	5.4
Location						
Nonmetropolitan	8.3	7.4	15.4	7.1	•	5.5
Metropolitan—						
Less than 1,000,000	8.8	6.7	15.0	6.8	11.4	5.7
1,000,000 and over	8.7	5.5	14.6	6.2	7.6	5.4
Employment Status						
Self-employed	9.2	6.8	16.0	6.5	7.5	5.7
Non-self-employed[c]	7.7	5.7	12.1	6.6	11.3	5.2
Employee	8.2	6.1	12.2	6.7	11.0	5.2
Independent contractor	5.4	3.8	11.8	•	•	•
Physician Age						
Less than 36 years	9.0	6.1	15.3	5.8	9.2	5.7
Less than 40 years	9.2	6.2	16.2	5.9	8.7	5.6
36-45 years	9.3	6.6	15.3	6.5	9.7	5.4
46-55 years	9.1	8.1	15.2	6.8	9.0	5.8
56-65 years	7.7	6.6	12.8	7.0	8.0	5.7
66 or more years	5.7	3.6	12.0	5.1	•	•

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

• Indicates fewer than 20 observations.

Table 11 (continued). **Standard Error of the Mean Number of Hours on Hospital Rounds per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.18	0.30	0.49	0.23	0.65	0.25
Census Division						
New England	0.75	·	1.68	1.08	0.91	·
Middle Atlantic	0.48	1.00	1.04	0.77	1.34	0.68
East North Central	0.42	0.70	0.99	0.56	2.14	0.57
West North Central	0.72	0.68	2.22	0.65	3.35	1.01
South Atlantic	0.44	0.82	1.13	0.51	1.27	0.56
East South Central	0.93	1.13	3.06	0.80	·	·
West South Central	0.57	0.75	1.85	0.71	1.20	0.63
Mountain	0.75	0.84	2.77	1.33	·	·
Pacific	0.41	0.70	1.15	0.48	1.65	0.71
Type of Practice						
Solo	0.29	0.41	0.80	0.38	0.52	0.44
Non-solo	0.24	0.43	0.61	0.30	0.84	0.30
Location						
Nonmetropolitan	0.48	0.55	1.68	0.81	·	0.82
Metropolitan—						
Less than 1,000,000	0.27	0.48	0.78	0.33	1.02	0.35
1,000,000 and over	0.28	0.51	0.67	0.36	0.87	0.39
Employment Status						
Self-employed	0.21	0.30	0.57	0.26	0.53	0.29
Non-self-employed[c]	0.36	0.72	0.91	0.57	1.38	0.47
Employee	0.42	0.86	1.01	0.63	1.47	0.53
Independent contractor	0.63	0.94	2.06	·	·	·
Physician Age						
Less than 36 years	0.50	0.72	1.25	0.61	1.40	0.41
Less than 40 years	0.37	0.48	0.99	0.43	1.02	0.43
36-45 years	0.31	0.43	0.83	0.36	0.97	0.44
46-55 years	0.37	0.96	0.92	0.43	1.56	0.50
56-65 years	0.39	0.73	1.02	0.64	1.70	0.48
66 or more years	0.57	0.65	1.80	0.94	·	·

Table 12. **Mean Number of Hours on Hospital Rounds per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	8.5	8.3	8.8	8.8	9.0	9.2	8.8	8.7
Specialty								
General/Family Practice	6.7	6.7	6.4	6.3	6.6	6.6	6.5	6.5
Internal Medicine	13.3	13.4	14.4	14.7	14.4	15.7	14.9	14.8
Surgery	8.1	7.2	7.8	7.7	8.1	7.2	6.8	6.5
Pediatrics	7.6	7.9	8.7	9.1	8.5	9.5	9.2	9.0
Obstetrics/Gynecology	6.4	5.5	6.4	5.5	6.3	5.9	5.6	5.6
Census Division								
New England	7.1	7.5	7.7	8.0	7.6	7.9	7.4	7.5
Middle Atlantic	9.0	9.6	9.7	9.4	10.2	10.5	9.5	10.0
East North Central	9.0	9.3	10.4	9.8	9.7	9.4	9.0	9.0
West North Central	9.1	7.8	8.3	9.3	9.4	10.4	8.4	8.6
South Atlantic	8.7	7.9	9.1	9.3	9.4	9.7	9.6	9.3
East South Central	9.3	8.9	9.0	10.2	10.1	8.7	9.1	10.3
West South Central	9.4	9.3	8.7	9.5	8.1	9.3	9.5	8.6
Mountain	7.4	7.0	7.4	6.8	7.6	8.4	7.3	8.0
Pacific	7.1	6.7	7.0	6.6	7.1	7.0	7.8	6.8
Type of Practice								
Solo	8.1	8.3	8.8	8.8	9.1	8.9	8.4	8.7
Non-solo	8.9	8.3	8.9	8.9	8.9	9.4	9.1	8.7
Location								
Nonmetropolitan	8.6	7.6	7.9	8.5	8.2	8.6	8.0	8.3
Metropolitan—								
Less than 1,000,000	8.7	8.4	9.2	9.3	8.8	9.5	9.2	8.8
1,000,000 and over	8.3	8.4	8.7	8.5	9.3	9.0	8.6	8.7
Physician Age								
Less than 36 years	9.2	8.2	9.4	9.9	9.4	8.2	9.1	9.0
Less than 40 years	9.9	9.3	9.6	10.0	10.0	10.6	9.9	9.2
36-45 years	9.7	9.3	9.8	9.9	10.0	10.9	9.9	9.3
46-55 years	8.6	8.8	8.9	8.9	9.2	8.8	9.2	9.1
56-65 years	7.1	7.1	7.5	7.2	7.8	7.7	7.3	7.7
66 or more years	5.2	5.9	6.4	5.9	5.8	6.6	5.2	5.7

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume.

See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 12 (continued). **Standard Error of the Mean Number of Hours on Hospital Rounds per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.16	0.17	0.18	0.18	0.18	0.19	0.19	0.18
Specialty								
General/Family Practice	0.25	0.26	0.26	0.25	0.28	0.25	0.26	0.30
Internal Medicine	0.49	0.52	0.50	0.47	0.48	0.52	0.53	0.49
Surgery	0.25	0.24	0.27	0.25	0.25	0.23	0.22	0.23
Pediatrics	0.41	0.51	0.55	0.60	0.62	0.67	0.67	0.65
Obstetrics/Gynecology	0.25	0.23	0.32	0.22	0.29	0.29	0.23	0.25
Census Division								
New England	0.58	0.64	0.74	0.67	0.53	0.56	0.87	0.75
Middle Atlantic	0.45	0.48	0.48	0.48	0.51	0.50	0.47	0.48
East North Central	0.41	0.44	0.53	0.45	0.42	0.43	0.43	0.42
West North Central	0.57	0.58	0.66	0.66	0.62	0.73	0.57	0.72
South Atlantic	0.41	0.35	0.45	0.45	0.42	0.50	0.48	0.44
East South Central	0.57	0.64	0.63	0.80	0.97	0.63	0.71	0.93
West South Central	0.50	0.57	0.50	0.59	0.52	0.60	0.60	0.57
Mountain	0.55	0.60	0.59	0.53	0.66	0.96	0.76	0.75
Pacific	0.39	0.37	0.36	0.35	0.43	0.41	0.45	0.41
Type of Practice								
Solo	0.21	0.24	0.26	0.25	0.27	0.27	0.27	0.29
Non-solo	0.24	0.23	0.25	0.25	0.24	0.25	0.25	0.24
Location								
Nonmetropolitan	0.39	0.38	0.40	0.45	0.42	0.41	0.42	0.48
Metropolitan—								
Less than 1,000,000	0.25	0.25	0.28	0.28	0.27	0.29	0.28	0.27
1,000,000 and over	0.25	0.26	0.27	0.26	0.27	0.28	0.28	0.28
Physician Age								
Less than 36 years	0.49	0.45	0.62	0.69	0.57	0.52	0.60	0.50
Less than 40 years	0.33	0.32	0.35	0.38	0.36	0.41	0.39	0.37
36-45 years	0.33	0.31	0.32	0.33	0.32	0.37	0.33	0.31
46-55 years	0.33	0.37	0.36	0.35	0.39	0.34	0.37	0.37
56-65 years	0.25	0.30	0.33	0.28	0.31	0.31	0.34	0.39
66 or more years	0.32	0.39	0.40	0.39	0.42	0.45	0.41	0.57

Table 13. **Mean Number of Hours in Surgery per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	6.6	1.6	2.3	15.8	1.0	17.3
Census Division						
New England	5.2	·	1.3	13.3	0.6	·
Middle Atlantic	6.0	0.6	2.3	16.1	0.7	14.7
East North Central	7.7	2.2	2.3	18.6	0.9	20.4
West North Central	7.2	1.9	3.1	16.0	2.6	19.3
South Atlantic	6.4	0.2	3.0	16.3	0.9	17.8
East South Central	6.4	0.4	0.6	16.6	·	·
West South Central	7.0	1.5	2.8	15.6	1.0	16.8
Mountain	7.9	3.5	1.9	16.9	·	·
Pacific	6.2	2.8	1.8	13.2	1.3	15.4
Type of Practice						
Solo	6.9	1.6	2.2	14.2	1.2	18.1
Non-solo	6.5	1.5	2.4	17.0	0.9	16.8
Location						
Nonmetropolitan	5.9	2.0	1.7	16.7	·	19.5
Metropolitan—						
Less than 1,000,000	7.3	1.5	2.8	16.3	1.3	18.0
1,000,000 and over	6.1	1.4	2.0	15.1	0.8	16.2
Employment Status						
Self-employed	7.6	1.8	2.2	15.8	1.1	18.8
Non-self-employed[c]	4.4	1.0	2.4	15.7	0.8	13.5
Employee	4.8	0.9	2.5	16.3	0.8	13.9
Independent contractor	2.9	1.5	1.7	·	·	·
Physician Age						
Less than 36 years	5.2	1.2	2.5	17.2	1.0	16.3
Less than 40 years	5.9	2.1	2.1	17.0	1.0	18.3
36-45 years	6.5	2.3	2.7	17.0	1.2	18.1
46-55 years	8.1	1.2	1.9	16.4	0.8	19.0
56-65 years	7.0	1.3	2.1	14.4	1.0	15.6
66 or more years	3.4	0.6	0.6	9.0	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 13 (continued). **Standard Error of the Mean Number of Hours in Surgery per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.19	0.17	0.26	0.39	0.11	0.72
Census Division						
New England	0.80	·	0.65	1.74	0.30	·
Middle Atlantic	0.47	0.62	0.59	1.01	0.20	1.90
East North Central	0.52	0.37	0.64	1.01	0.30	2.21
West North Central	0.73	0.40	1.41	1.50	0.80	2.98
South Atlantic	0.44	0.11	0.67	0.99	0.24	1.34
East South Central	0.75	0.22	0.35	1.47	·	·
West South Central	0.60	0.39	1.04	1.26	0.32	1.71
Mountain	0.95	0.90	1.57	1.95	·	·
Pacific	0.40	0.69	0.54	0.71	0.27	1.44
Type of Practice						
Solo	0.32	0.31	0.39	0.58	0.22	1.37
Non-solo	0.23	0.18	0.33	0.51	0.13	0.82
Location						
Nonmetropolitan	0.58	0.31	0.91	1.58	·	2.66
Metropolitan—						
Less than 1,000,000	0.30	0.23	0.44	0.57	0.17	1.12
1,000,000 and over	0.27	0.36	0.32	0.55	0.16	0.99
Employment Status						
Self-employed	0.23	0.22	0.29	0.42	0.15	0.87
Non-self-employed[c]	0.30	0.23	0.53	1.03	0.16	1.18
Employee	0.35	0.23	0.58	1.12	0.17	1.37
Independent contractor	0.48	0.65	1.16	·	·	·
Physician Age						
Less than 36 years	0.46	0.28	0.64	1.65	0.25	1.21
Less than 40 years	0.33	0.40	0.40	0.84	0.18	1.13
36-45 years	0.29	0.37	0.44	0.58	0.20	1.07
46-55 years	0.43	0.31	0.46	0.70	0.20	1.59
56-65 years	0.48	0.30	0.71	0.89	0.32	1.53
66 or more years	0.55	0.19	0.38	1.55	·	·

Table 14. **Mean Number of Hours in Surgery per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	5.5	5.6	6.2	6.2	6.5	6.2	6.2	6.6
Specialty								
General/Family Practice	2.0	1.7	1.9	1.8	1.8	1.6	1.5	1.6
Internal Medicine	1.3	1.4	1.6	2.0	1.8	1.4	1.6	2.3
Surgery	13.1	13.4	14.6	14.6	15.7	15.0	15.4	15.8
Pediatrics	1.2	0.9	1.2	1.5	1.6	1.6	1.2	1.0
Obstetrics/Gynecology	13.6	14.6	17.1	15.8	16.9	15.8	16.8	17.3
Census Division								
New England	4.6	4.7	5.2	5.5	5.4	5.2	4.6	5.2
Middle Atlantic	5.1	5.4	5.6	5.2	5.9	5.5	5.6	6.0
East North Central	6.1	5.3	6.9	7.4	7.0	6.0	7.0	7.7
West North Central	7.0	5.9	6.1	6.8	6.1	6.3	6.6	7.2
South Atlantic	5.4	6.0	5.9	6.2	6.9	6.6	6.3	6.4
East South Central	5.6	6.7	6.3	5.5	5.8	6.5	6.4	6.4
West South Central	6.1	5.9	6.3	6.0	6.8	6.6	6.8	7.0
Mountain	5.4	6.8	6.8	7.6	8.8	6.4	7.1	7.9
Pacific	5.0	5.2	6.5	6.1	6.1	6.5	5.8	6.2
Type of Practice								
Solo	5.6	5.6	6.0	6.4	7.0	6.0	6.1	6.9
Non-solo	5.5	5.7	6.4	6.1	6.2	6.2	6.3	6.5
Location								
Nonmetropolitan	5.5	5.5	5.6	5.6	5.3	6.0	5.7	5.9
Metropolitan—								
Less than 1,000,000	6.2	6.1	6.7	6.4	7.3	6.6	6.6	7.3
1,000,000 and over	5.0	5.3	5.9	6.1	6.1	5.8	6.1	6.1
Physician Age								
Less than 36 years	4.0	3.9	5.6	5.5	4.5	4.6	4.3	5.2
Less than 40 years	4.7	4.7	5.8	5.7	5.6	5.0	5.6	5.9
36-45 years	6.0	6.2	6.3	6.3	6.7	5.7	6.5	6.5
46-55 years	6.5	6.8	7.5	7.9	7.7	7.8	7.6	8.1
56-65 years	5.5	5.3	5.7	5.3	6.7	6.5	5.9	7.0
66 or more years	3.5	3.0	4.1	3.8	3.9	3.7	3.3	3.4

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 14 (continued). **Standard Error of the Mean Number of Hours in Surgery per Week, 1984-1991**[a]

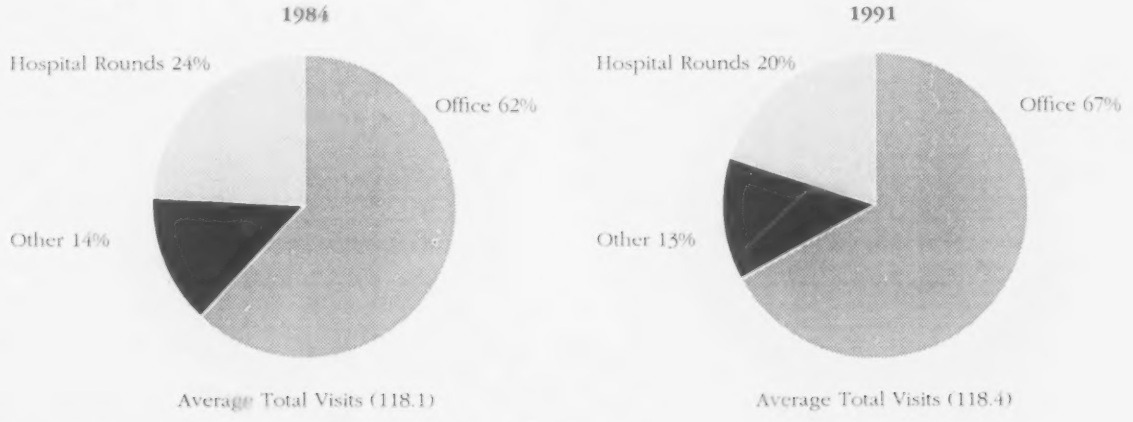
	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.16	0.16	0.18	0.18	0.18	0.17	0.18	0.19
Specialty								
General/Family Practice	0.17	0.13	0.15	0.14	0.15	0.14	0.13	0.17
Internal Medicine	0.23	0.24	0.25	0.24	0.23	0.20	0.21	0.26
Surgery	0.31	0.33	0.38	0.35	0.36	0.34	0.34	0.39
Pediatrics	0.17	0.11	0.15	0.19	0.20	0.32	0.14	0.11
Obstetrics/Gynecology	0.48	0.55	0.69	0.65	0.67	0.68	0.74	0.72
Census Division								
New England	0.61	0.68	0.75	0.73	0.68	0.68	0.70	0.80
Middle Atlantic	0.42	0.40	0.47	0.42	0.46	0.41	0.43	0.47
East North Central	0.40	0.37	0.52	0.52	0.49	0.39	0.47	0.52
West North Central	0.66	0.62	0.67	0.70	0.59	0.65	0.68	0.73
South Atlantic	0.35	0.38	0.42	0.42	0.44	0.44	0.43	0.44
East South Central	0.60	0.82	0.72	0.68	0.70	0.78	0.79	0.75
West South Central	0.51	0.52	0.47	0.46	0.52	0.54	0.57	0.60
Mountain	0.62	0.79	0.79	0.84	0.86	0.74	0.81	0.95
Pacific	0.36	0.35	0.45	0.43	0.47	0.48	0.39	0.40
Type of Practice								
Solo	0.22	0.23	0.25	0.25	0.30	0.26	0.28	0.32
Non-solo	0.22	0.23	0.26	0.25	0.23	0.23	0.23	0.23
Location								
Nonmetropolitan	0.39	0.46	0.46	0.44	0.41	0.51	0.47	0.58
Metropolitan—								
Less than 1,000,000	0.25	0.26	0.28	0.28	0.29	0.26	0.27	0.30
1,000,000 and over	0.23	0.22	0.28	0.27	0.27	0.26	0.27	0.27
Physician Age								
Less than 36 years	0.37	0.38	0.58	0.53	0.42	0.47	0.42	0.46
Less than 40 years	0.26	0.26	0.33	0.32	0.32	0.30	0.33	0.33
36-45 years	0.30	0.29	0.29	0.31	0.32	0.27	0.31	0.29
46-55 years	0.35	0.37	0.40	0.40	0.39	0.40	0.39	0.43
56-65 years	0.32	0.34	0.42	0.34	0.41	0.40	0.37	0.48
66 or more years	0.34	0.32	0.46	0.41	0.42	0.42	0.42	0.55

Utilization of Physician Services

Utilization of physician services refers to the quantity of services provided by physicians to their patients. The number of patient visits is a measure that captures a large proportion of the overall utilization of physician services. In the statistics that follow, total visits are decomposed into office visits, visits on hospital rounds, and other visits. Other visits include those in hospital emergency rooms and outpatient clinics, nursing homes, extended care facilities, and all other settings.

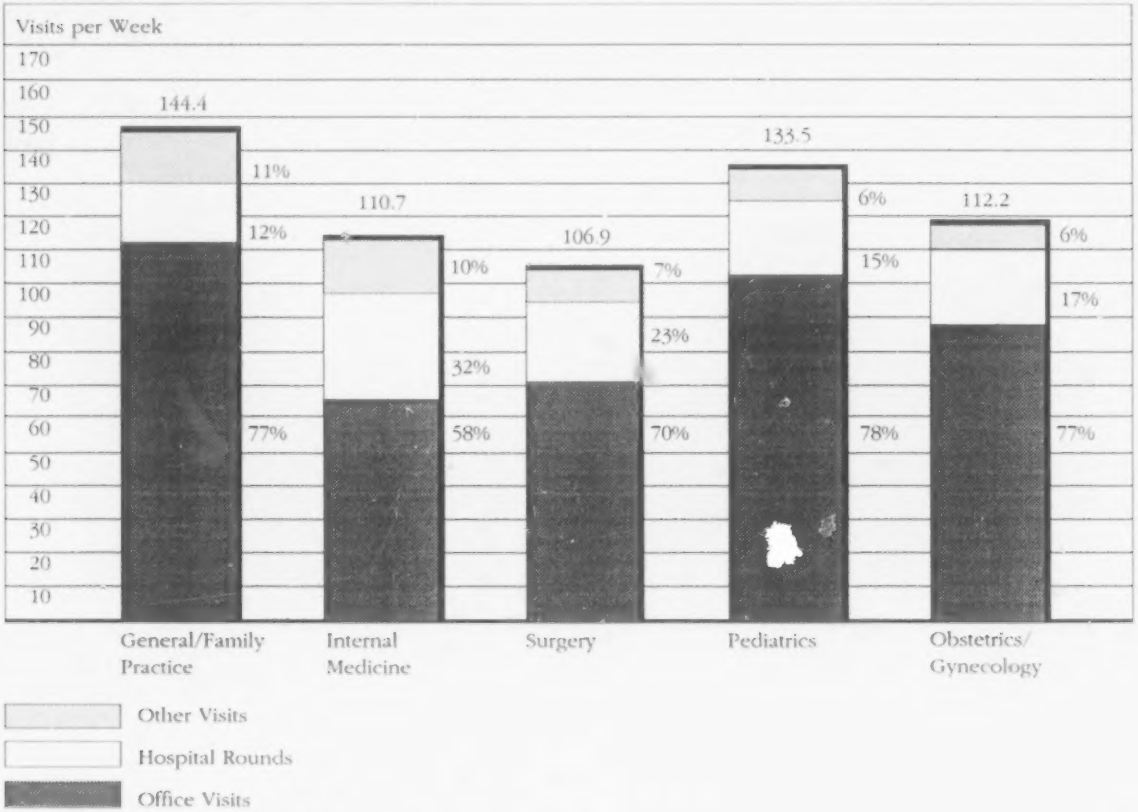
As shown in Figure 4, the average number of patient visits per physician per week was 118.1 in 1991. This represents a 0.3% decrease from 118.4 visits per week in 1984. The distribution of visits showed a slight shift toward more visits in the office and away from inpatient visits. Figure 5 indicates how the average number and distribution of visits differ across specialties. Similarly, Figure 6 indicates wide differences in the number of weekly visits per physician across geographic areas, ranging from 104.8 to 141.7, respectively, in the New England and East South Central Census Divisions.

Figure 4. **Distribution of Average Total Patient Visits per Week of All Physicians, 1984 and 1991**[a]



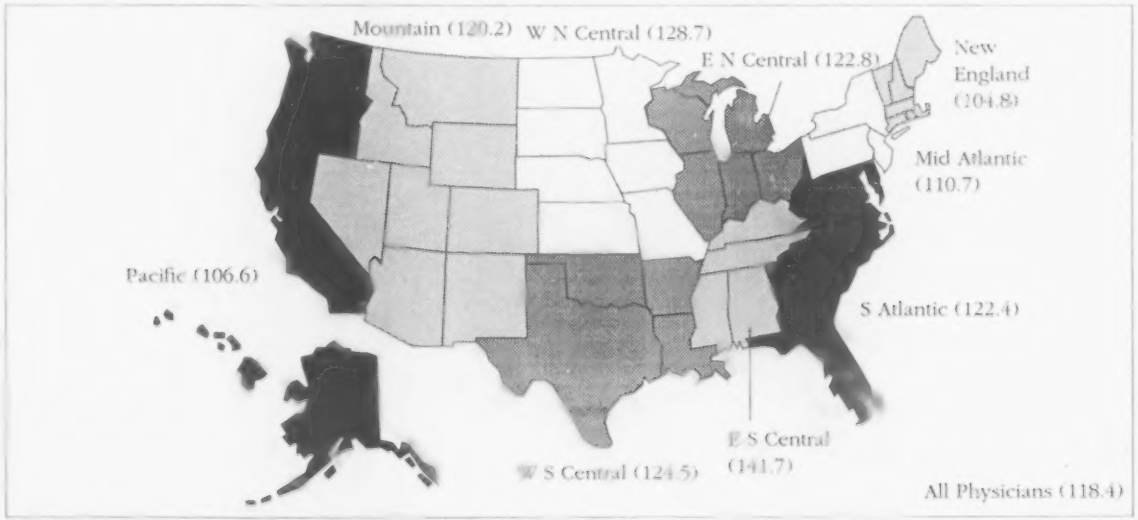
Source: AMA Socioeconomic Monitoring System 1984 and 1991 core surveys.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Figure 5. **Distribution of Average Total Patient Visits per Week, by Specialty, 1991[a]**



Source: AMA Socioeconomic Monitoring System 1991 core survey.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Figure 6. **Average Total Patient Visits per Physician per Week, by Census Division, 1991[a]**



Source: AMA Socioeconomic Monitoring System 1991 core survey.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Table 15. **Mean Number of Total Patient Visits per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	118.4	144.4	110.7	106.9	133.5	112.2
Census Division						
New England	104.8	·	97.5	107.7	·	·
Middle Atlantic	110.7	131.7	108.5	107.3	123.5	106.3
East North Central	122.8	153.5	111.2	114.6	127.7	118.5
West North Central	128.7	158.6	115.6	108.2	147.9	117.1
South Atlantic	122.7	139.2	114.0	111.1	136.9	121.7
East South Central	141.7	194.7	125.7	116.2	·	·
West South Central	124.5	160.2	118.8	100.4	145.7	113.7
Mountain	120.2	148.2	112.3	106.1	·	·
Pacific	106.6	114.3	105.6	97.0	133.7	107.1
Type of Practice						
Solo	117.6	151.4	110.0	99.5	141.3	104.7
Non-solo	118.9	138.3	111.0	112.6	130.6	116.4
Location						
Nonmetropolitan	142.6	172.6	132.3	108.4	·	116.5
Metropolitan—						
Less than 1,000,000	123.4	144.0	114.4	114.6	137.2	120.0
1,000,000 and over	108.6	123.9	105.2	98.6	130.4	104.2
Employment Status						
Self-employed	124.1	153.1	117.1	108.4	151.0	117.9
Non-self-employed[c]	105.4	123.5	96.0	99.8	106.2	98.5
Employee	102.5	119.0	92.1	100.5	105.9	100.8
Independent contractor	117.7	143.3	122.9	·	·	·
Physician Age						
Less than 36 years	114.5	127.4	108.1	102.2	122.9	99.2
Less than 40 years	114.0	133.2	107.6	103.2	119.1	107.1
36-45 years	116.7	144.6	109.0	102.9	125.9	118.9
46-55 years	125.2	165.4	118.1	116.4	143.9	114.4
56-65 years	124.1	160.9	117.3	104.8	136.1	116.9
66 or more years	96.9	102.6	82.1	91.2	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 15 (continued). **Standard Error of the Mean Number of Total Patient Visits per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	1.19	3.25	2.32	2.00	3.91	3.23
Census Division						
New England	4.41	·	7.52	7.25	·	·
Middle Atlantic	2.87	8.98	5.16	5.04	10.17	10.04
East North Central	2.74	7.72	4.93	4.63	7.89	7.71
West North Central	4.98	10.64	10.65	8.82	16.19	9.63
South Atlantic	2.74	6.51	5.73	4.82	8.99	9.14
East South Central	6.40	18.50	12.70	6.88	·	·
West South Central	4.19	8.77	9.22	7.47	16.76	9.19
Mountain	5.91	14.88	13.20	12.44	·	·
Pacific	2.39	6.39	5.45	4.22	6.55	6.89
Type of Practice						
Solo	2.15	5.68	3.95	3.13	7.19	5.90
Non-solo	1.40	3.65	2.87	2.56	4.64	3.78
Location						
Nonmetropolitan	4.67	7.70	10.83	6.81	·	12.93
Metropolitan—						
Less than 1,000,000	1.78	4.62	3.49	3.03	6.52	5.16
1,000,000 and over	1.60	4.84	3.16	2.79	5.11	4.18
Employment Status						
Self-employed	1.45	4.03	2.82	2.23	4.61	3.96
Non-self-employed[c]	1.96	5.01	3.83	4.39	6.24	5.17
Employee	2.08	4.88	3.86	4.48	6.59	5.72
Independent contractor	5.12	15.62	13.02	·	·	·
Physician Age						
Less than 36 years	2.50	4.74	4.83	5.92	7.23	5.91
Less than 40 years	1.84	4.19	3.69	3.58	6.01	5.31
36-45 years	1.78	4.76	3.54	2.98	5.68	6.04
46-55 years	2.58	11.10	4.75	3.63	9.05	5.97
56-65 years	3.46	8.53	7.86	5.25	10.24	8.19
66 or more years	4.51	7.40	8.78	8.86	·	·

Table 16. **Mean Number of Total Patient Visits per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	118.1	117.1	117.7	119.3	121.1	121.6	120.9	118.4
Specialty								
General/Family Practice	139.0	138.1	139.2	138.3	145.6	143.0	146.0	144.4
Internal Medicine	107.7	105.2	111.1	114.5	113.0	117.9	112.0	110.7
Surgery	110.0	108.2	105.8	107.8	105.0	107.7	107.6	106.9
Pediatrics	128.7	130.8	131.9	127.4	135.1	138.1	134.0	133.5
Obstetrics/Gynecology	115.7	112.0	114.8	112.7	118.9	115.6	120.0	112.2
Census Division								
New England	108.7	98.2	109.5	112.0	105.0	109.5	106.3	104.8
Middle Atlantic	114.4	110.9	110.3	109.5	113.9	116.1	111.3	110.7
East North Central	123.1	122.6	121.3	125.7	124.6	122.1	125.3	122.8
West North Central	128.6	117.6	122.0	128.9	136.0	138.2	136.2	128.7
South Atlantic	119.9	122.3	118.9	122.3	123.6	127.5	127.4	122.7
East South Central	153.8	157.5	148.9	151.1	158.4	155.4	156.1	141.7
West South Central	132.6	127.5	126.3	125.7	119.8	126.0	122.2	124.5
Mountain	114.2	109.9	111.2	115.0	118.6	120.7	111.9	120.2
Pacific	94.7	102.4	107.4	104.2	111.6	104.2	107.5	106.6
Type of Practice								
Solo	113.7	112.3	112.2	114.0	115.6	115.1	116.0	117.6
Non-solo	122.3	121.2	122.0	123.2	124.9	125.9	123.9	118.9
Location								
Nonmetropolitan	150.3	144.0	140.0	141.5	153.3	150.6	150.1	142.6
Metropolitan—								
Less than 1,000,000	125.6	123.7	124.1	127.6	127.1	129.2	127.6	123.4
1,000,000 and over	104.1	105.6	106.7	106.6	108.8	108.3	108.3	108.6
Physician Age								
Less than 36 years	118.3	115.6	121.6	118.5	121.3	115.3	116.2	114.5
Less than 40 years	115.8	116.9	120.3	123.2	122.5	122.9	120.4	114.0
36-45 years	116.0	118.4	119.4	124.3	124.8	127.4	124.1	116.7
46-55 years	128.4	119.9	120.8	122.0	124.1	126.6	127.7	125.2
56-65 years	121.1	121.9	113.6	115.7	119.5	115.8	114.5	124.1
66 or more years	91.7	94.9	104.1	96.2	100.2	100.0	101.4	96.9

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 16 (continued). **Standard Error of the Mean Number of Total Patient Visits per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	1.30	1.27	1.32	1.22	1.28	1.23	1.32	1.19
Specialty								
General/Family Practice	3.13	2.79	2.97	2.93	2.94	2.83	3.27	3.25
Internal Medicine	2.80	2.99	3.11	2.50	2.36	2.52	2.29	2.32
Surgery	2.16	2.18	2.27	2.03	2.16	2.14	2.44	2.00
Pediatrics	3.97	3.68	4.09	3.67	4.00	4.53	4.65	3.91
Obstetrics/Gynecology	3.13	2.98	3.19	3.11	3.45	3.39	3.94	3.23
Census Division								
New England	5.16	4.25	4.80	4.28	3.95	3.61	4.22	4.41
Middle Atlantic	3.45	3.49	2.83	2.67	2.91	2.80	2.88	2.87
East North Central	3.29	3.32	3.24	3.30	3.23	2.97	3.07	2.74
West North Central	5.03	3.92	4.08	4.03	5.41	4.78	5.35	4.98
South Atlantic	2.85	2.91	3.78	3.21	3.28	3.27	3.74	2.74
East South Central	6.68	7.09	7.86	5.91	7.19	6.26	6.71	6.40
West South Central	4.00	4.07	3.94	4.14	3.46	4.03	4.38	4.19
Mountain	5.36	4.61	4.62	4.60	5.21	5.29	5.32	5.91
Pacific	2.41	2.40	2.79	2.38	2.83	2.60	2.53	2.39
Type of Practice								
Solo	1.85	1.83	1.76	1.75	2.06	1.90	2.06	2.15
Non-solo	1.81	1.75	1.89	1.67	1.63	1.60	1.72	1.40
Location								
Nonmetropolitan	4.14	4.29	3.91	3.78	4.52	4.40	4.79	4.67
Metropolitan—								
Less than 1,000,000	2.01	1.99	2.22	2.02	2.01	1.86	2.15	1.78
1,000,000 and over	1.74	1.69	1.68	1.54	1.68	1.66	1.62	1.60
Physician Age								
Less than 36 years	3.40	3.08	3.61	3.08	3.25	2.86	3.68	2.50
Less than 40 years	2.17	2.12	2.08	2.03	2.17	2.21	2.63	1.84
36-45 years	2.27	2.18	2.00	2.04	2.07	2.12	2.20	1.78
46-55 years	2.85	2.80	3.07	2.77	2.74	2.59	2.79	2.58
56-65 years	2.80	3.00	3.11	2.57	3.00	2.65	2.83	3.46
66 or more years	3.41	3.33	4.22	3.61	4.51	3.97	4.24	4.51

Table 17. **Mean Number of Office Visits per Week, 1991**[a]

	All Physicians[b]	Specialty				
		General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	79.2	111.6	64.3	75.4	104.4	86.6
Census Division						
New England	76.6	·	64.3	86.8	110.5	·
Middle Atlantic	68.0	93.5	60.5	70.0	89.0	74.0
East North Central	80.2	119.1	66.3	77.3	104.4	86.0
West North Central	85.1	122.9	57.0	78.5	88.5	91.9
South Atlantic	80.6	109.0	66.7	75.0	110.9	95.0
East South Central	96.3	153.0	62.7	88.2	·	·
West South Central	82.2	119.4	57.8	69.8	124.9	84.6
Mountain	81.3	123.0	68.8	63.6	·	·
Pacific	78.0	87.4	69.6	75.0	110.1	90.2
Type of Practice						
Solo	87.7	119.7	69.2	74.3	124.5	85.6
Non-solo	74.2	104.8	61.8	76.3	97.3	87.2
Location						
Nonmetropolitan	96.1	126.1	72.3	73.2	·	85.9
Metropolitan—						
Less than 1,000,000	82.1	111.8	67.5	80.3	103.1	94.8
1,000,000 and over	72.9	100.6	61.0	70.6	104.8	78.7
Employment Status						
Self-employed	88.0	119.4	70.1	78.8	130.0	94.8
Non-self-employed[c]	58.3	92.6	50.8	58.3	64.6	67.2
Employee	60.4	89.7	48.7	60.2	65.5	67.6
Independent contractor	49.7	105.1	65.0	·	·	·
Physician Age						
Less than 36 years	70.0	99.9	56.2	64.6	91.6	71.5
Less than 40 years	71.0	103.1	57.5	74.0	91.3	83.4
36-45 years	76.5	114.4	63.3	74.0	96.1	95.6
46-55 years	85.8	120.6	69.7	82.2	111.4	91.3
56-65 years	84.3	121.6	71.9	72.8	112.8	80.6
66 or more years	74.8	84.8	54.8	67.7	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 17 (continued). **Standard Error of the Mean Number of Office Visits per Week, 1991**[a]

	All Physicians[b]	Specialty				
		General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	1.06	2.74	1.70	1.78	3.83	2.74
Census Division						
New England	4.25	·	5.74	7.67	18.21	·
Middle Atlantic	2.63	7.25	4.44	4.77	9.84	8.93
East North Central	2.58	6.44	3.86	4.28	9.58	7.83
West North Central	4.52	8.60	6.48	9.52	14.50	8.62
South Atlantic	2.39	5.79	3.86	3.83	8.81	6.30
East South Central	5.45	15.61	6.89	7.09	·	·
West South Central	3.69	7.33	5.54	6.10	16.05	7.22
Mountain	4.86	10.57	9.85	7.03	·	·
Pacific	2.21	5.79	4.13	3.70	6.57	5.57
Type of Practice						
Solo	1.78	4.39	2.95	2.74	6.58	4.55
Non-solo	1.31	3.42	2.07	2.33	4.55	3.45
Location						
Nonmetropolitan	3.68	5.87	5.71	5.57	·	8.72
Metropolitan—						
Less than 1,000,000	1.64	4.26	2.58	2.73	6.50	4.31
1,000,000 and over	1.46	4.20	2.43	2.50	4.98	3.71
Employment Status						
Self-employed	1.24	3.16	1.97	1.96	4.34	3.05
Non-self-employed[c]	1.87	5.13	3.14	3.89	5.60	5.28
Employee	2.03	5.31	3.31	4.27	5.90	5.91
Independent contractor	4.56	14.12	9.19	·	·	·
Physician Age						
Less than 36 years	2.34	4.11	3.60	4.58	7.87	6.06
Less than 40 years	1.75	3.59	2.76	3.84	6.06	4.55
36-45 years	1.66	4.20	2.60	2.92	5.64	4.61
46-55 years	2.24	8.67	3.57	3.24	8.43	4.85
56-65 years	3.01	7.67	5.79	4.58	10.14	7.56
66 or more years	3.70	6.14	4.75	6.22	·	·

Table 18. **Mean Number of Office Visits per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	73.0	73.5	75.7	77.0	79.2	79.1	79.7	79.2
Specialty								
General/Family Practice	99.5	101.8	106.3	106.4	112.3	109.1	112.5	111.6
Internal Medicine	57.5	57.2	60.0	64.1	64.9	65.9	64.3	64.3
Surgery	68.1	68.0	69.8	73.0	70.2	73.1	74.7	75.4
Pediatrics	96.0	96.9	100.7	91.8	102.2	101.8	105.1	104.4
Obstetrics/Gynecology	84.3	84.5	85.2	88.2	91.4	89.3	92.8	86.6
Census Division								
New England	62.5	59.1	70.3	72.4	69.2	66.8	69.4	76.6
Middle Atlantic	64.1	66.5	67.6	67.5	70.4	73.7	67.7	68.0
East North Central	74.0	76.6	75.5	78.1	81.3	78.8	83.7	80.2
West North Central	80.6	78.9	80.0	82.5	88.5	89.0	89.7	85.1
South Atlantic	77.2	78.4	74.8	78.7	80.9	82.5	85.3	80.6
East South Central	94.8	93.7	92.5	95.1	101.2	96.2	98.6	96.3
West South Central	80.8	78.8	81.6	84.3	80.6	83.8	78.4	82.2
Mountain	73.6	67.3	75.7	77.0	76.8	78.2	74.7	81.3
Pacific	65.0	67.5	75.6	72.2	77.7	74.4	76.8	78.0
Type of Practice								
Solo	76.6	78.7	79.2	82.7	84.5	85.3	85.6	87.7
Non-solo	69.6	69.0	72.9	72.9	75.6	74.9	76.0	74.2
Location								
Nonmetropolitan	96.9	92.9	92.5	97.2	102.6	100.1	104.5	96.1
Metropolitan—								
Less than 1,000,000	77.0	76.6	78.5	80.6	82.8	82.6	81.8	82.1
1,000,000 and over	64.1	66.5	69.1	69.1	71.1	71.3	72.3	72.9
Physician Age								
Less than 36 years	63.0	59.7	69.8	70.1	72.4	72.6	72.7	70.0
Less than 40 years	64.0	64.1	71.3	72.6	73.8	73.5	74.0	71.0
36-45 years	66.7	69.9	72.7	75.0	76.6	78.0	78.5	76.5
46-55 years	83.1	79.4	81.3	81.1	81.4	81.5	82.7	85.8
56-65 years	83.7	83.5	80.5	83.6	86.5	83.4	83.3	84.3
66 or more years	63.9	69.8	71.1	69.5	75.8	73.4	75.5	74.8

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 18 (continued). **Standard Error of the Mean Number of Office Visits per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	1.04	1.05	1.07	1.02	1.09	1.03	1.14	1.06
Specialty								
General/Family Practice	2.26	2.17	2.37	2.38	2.46	2.21	2.54	2.74
Internal Medicine	1.96	2.11	1.96	1.69	1.70	1.83	1.72	1.70
Surgery	1.75	1.76	1.93	1.75	1.81	1.76	2.13	1.78
Pediatrics	3.55	3.53	3.53	3.53	3.96	3.67	4.42	3.83
Obstetrics/Gynecology	2.67	2.32	2.58	2.53	2.43	2.79	3.08	2.74
Census Division								
New England	4.03	3.98	4.48	3.92	3.43	3.42	4.16	4.25
Middle Atlantic	2.58	2.69	2.33	2.29	2.50	2.43	2.40	2.63
East North Central	2.65	2.77	2.70	2.62	2.72	2.43	2.50	2.58
West North Central	3.75	3.65	3.61	3.41	3.95	4.01	4.63	4.52
South Atlantic	2.46	2.38	2.70	2.57	2.72	2.48	3.34	2.39
East South Central	4.89	5.29	5.03	5.32	6.17	5.63	5.30	5.45
West South Central	3.44	3.44	3.26	3.41	3.05	3.17	3.68	3.69
Mountain	4.60	4.12	4.48	4.37	4.74	4.45	4.76	4.86
Pacific	2.25	2.32	2.73	2.30	2.78	2.52	2.42	2.21
Type of Practice								
Solo	1.42	1.53	1.46	1.47	1.72	1.54	1.70	1.78
Non-solo	1.51	1.44	1.52	1.41	1.41	1.35	1.50	1.31
Location								
Nonmetropolitan	2.98	3.02	3.00	3.10	3.58	3.37	3.69	3.68
Metropolitan—								
Less than 1,000,000	1.64	1.65	1.66	1.62	1.77	1.56	1.85	1.64
1,000,000 and over	1.45	1.50	1.54	1.41	1.44	1.45	1.47	1.46
Physician Age								
Less than 36 years	2.71	2.49	3.02	2.98	2.97	2.57	3.32	2.34
Less than 40 years	1.74	1.67	1.82	1.80	1.89	1.81	2.33	1.75
36-45 years	1.82	1.78	1.65	1.74	1.75	1.72	1.96	1.66
46-55 years	2.28	2.33	2.33	2.21	2.22	2.17	2.23	2.24
56-65 years	2.25	2.50	2.69	2.20	2.73	2.27	2.49	3.01
66 or more years	2.66	2.84	3.26	2.90	3.74	3.42	3.64	3.70

Table 19. **Mean Number of Visits on Hospital Rounds per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	23.6	17.1	35.2	24.1	20.6	18.9
Census Division						
New England	16.7	·	23.9	17.0	6.3	·
Middle Atlantic	27.0	19.2	34.2	27.5	21.6	21.6
East North Central	24.2	17.2	32.4	27.6	25.2	20.4
West North Central	24.6	19.0	39.0	19.6	46.0	21.9
South Atlantic	25.9	17.1	40.3	28.8	16.6	19.9
East South Central	32.4	26.7	54.9	28.0	·	·
West South Central	25.8	20.2	51.0	24.6	15.4	20.4
Mountain	22.4	11.9	32.0	32.2	·	·
Pacific	15.8	11.6	25.3	15.0	13.5	12.1
Type of Practice						
Solo	21.0	17.1	32.4	18.8	13.4	16.7
Non-solo	25.1	17.1	36.6	28.1	23.2	20.1
Location						
Nonmetropolitan	24.8	22.4	39.6	25.0	·	20.3
Metropolitan—						
Less than 1,000,000	24.8	17.0	36.0	27.0	25.6	21.5
1,000,000 and over	22.2	13.3	34.1	20.8	17.0	16.1
Employment Status						
Self-employed	24.9	18.6	38.1	23.5	16.6	19.2
Non-self-employed[c]	20.5	13.5	28.6	27.0	26.7	18.0
Employee	21.7	13.8	28.0	27.3	26.0	19.2
Independent contractor	15.3	12.1	32.7	·	·	·
Physician Age						
Less than 36 years	23.4	13.4	36.1	25.1	21.1	19.3
Less than 40 years	23.2	14.3	36.3	22.3	17.9	19.9
36-45 years	23.7	16.7	34.7	22.7	21.7	19.1
46-55 years	26.2	21.2	37.5	26.9	22.4	19.3
56-65 years	22.4	19.7	34.6	23.4	15.8	19.0
66 or more years	15.8	12.0	27.5	17.1	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 19 (continued). **Standard Error of the Mean Number of Visits on Hospital Rounds per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.60	0.89	1.51	1.21	2.06	1.00
Census Division						
New England	1.76	·	3.48	4.07	1.12	·
Middle Atlantic	1.46	3.28	2.75	2.72	5.15	3.25
East North Central	1.31	1.85	3.15	2.95	4.49	2.85
West North Central	2.37	2.54	5.15	3.78	15.06	2.91
South Atlantic	1.57	2.21	4.20	3.54	2.10	2.61
East South Central	3.26	4.90	10.54	4.09	·	·
West South Central	2.03	2.45	6.59	4.49	2.92	2.87
Mountain	3.15	2.69	7.35	8.71	·	·
Pacific	1.13	1.83	3.16	2.13	3.53	1.68
Type of Practice						
Solo	0.83	1.38	2.26	1.47	1.49	1.64
Non-solo	0.81	1.17	1.98	1.77	2.72	1.26
Location						
Nonmetropolitan	1.63	2.03	5.23	3.52	·	4.47
Metropolitan—						
Less than 1,000,000	0.91	1.31	2.42	1.83	3.42	1.60
1,000,000 and over	0.89	1.43	2.07	1.74	2.68	1.23
Employment Status						
Self-employed	0.69	1.05	1.75	1.32	1.37	1.21
Non-self-employed[c]	1.17	1.67	2.90	2.99	4.68	1.79
Employee	1.30	1.90	2.77	3.22	5.05	2.05
Independent contractor	2.63	3.48	12.82	·	·	·
Physician Age						
Less than 36 years	1.55	1.51	3.68	4.03	4.90	1.46
Less than 40 years	1.04	1.17	2.63	2.24	2.98	1.73
36-45 years	0.92	1.29	2.19	1.97	3.12	1.79
46-55 years	1.30	2.66	3.22	2.31	5.13	2.08
56-65 years	1.48	2.39	4.80	2.56	3.57	2.27
66 or more years	2.18	3.03	6.78	4.78	·	·

Table 20. **Mean Number of Visits on Hospital Rounds per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	28.4	27.2	25.8	25.1	24.8	26.0	24.2	23.6
Specialty								
General/Family Practice	24.4	22.0	18.0	16.9	17.0	18.8	17.7	17.1
Internal Medicine	37.6	35.3	37.7	37.0	35.5	39.3	36.2	35.2
Surgery	33.9	31.9	27.7	28.1	26.5	26.7	24.8	24.1
Pediatrics	18.6	21.0	21.1	21.6	21.2	26.6	21.7	20.6
Obstetrics/Gynecology	23.9	23.7	23.7	19.9	22.9	19.7	19.7	18.9
Census Division								
New England	26.1	22.5	20.9	20.1	19.4	19.0	18.4	16.7
Middle Atlantic	30.8	29.5	27.2	27.2	27.3	27.8	25.8	27.0
East North Central	30.3	27.5	29.5	27.9	24.3	25.9	23.2	24.2
West North Central	35.2	27.5	26.3	28.8	32.4	32.5	26.7	24.6
South Atlantic	28.5	27.5	27.6	26.1	26.3	29.8	28.1	25.9
East South Central	37.5	44.3	33.7	34.5	32.3	31.6	29.1	32.4
West South Central	32.9	33.9	28.0	26.0	26.1	29.0	25.8	25.8
Mountain	22.6	22.4	21.7	20.5	22.7	22.8	22.1	22.4
Pacific	18.3	17.6	17.1	16.3	16.9	17.3	18.5	15.8
Type of Practice								
Solo	25.9	23.9	22.6	21.9	21.7	21.6	21.2	21.0
Non-solo	30.7	30.0	28.3	27.5	26.9	29.0	26.1	25.1
Location								
Nonmetropolitan	36.6	32.4	26.4	26.0	26.9	28.2	24.8	24.8
Metropolitan—								
Less than 1,000,000	30.2	29.4	29.1	27.5	25.1	28.7	26.6	24.8
1,000,000 and over	24.9	24.1	22.7	22.6	24.1	23.1	21.9	22.2
Physician Age								
Less than 36 years	28.3	25.7	27.6	24.0	24.7	21.1	22.2	23.4
Less than 40 years	29.6	28.4	27.6	27.1	27.0	28.6	25.7	23.2
36-45 years	30.9	29.3	28.7	28.5	27.8	30.6	26.3	23.7
46-55 years	31.1	30.5	27.0	26.1	26.1	27.2	27.6	26.2
56-65 years	25.4	24.9	21.2	21.0	21.7	21.8	20.1	22.4
66 or more years	17.1	15.6	16.3	16.2	15.2	16.5	13.8	15.8

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume.
See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 20 (continued). **Standard Error of the Mean Number of Visits on Hospital Rounds per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.61	0.67	0.65	0.61	0.66	0.71	0.58	0.60
Specialty								
General/Family Practice	1.20	1.14	0.94	0.84	0.82	1.10	0.90	0.89
Internal Medicine	1.64	1.90	1.70	1.56	1.46	1.63	1.45	1.51
Surgery	1.23	1.39	1.27	1.24	1.16	1.30	1.14	1.21
Pediatrics	1.22	1.91	2.34	1.91	2.06	3.51	1.96	2.06
Obstetrics/Gynecology	1.18	1.25	1.26	1.08	1.69	1.13	1.20	1.00
Census Division								
New England	2.37	2.14	2.05	1.84	1.74	1.47	2.09	1.76
Middle Atlantic	1.74	2.02	1.70	1.75	1.63	1.68	1.54	1.46
East North Central	1.62	1.54	1.94	1.74	1.31	1.52	1.27	1.31
West North Central	2.45	2.04	2.42	2.47	4.14	2.50	2.06	2.37
South Atlantic	1.46	1.50	1.81	1.51	1.60	2.37	1.68	1.57
East South Central	2.99	3.95	2.63	2.93	3.54	2.83	2.43	3.26
West South Central	1.91	2.50	1.88	1.73	2.08	2.68	1.96	2.03
Mountain	1.98	2.34	2.06	1.79	2.18	2.22	2.33	3.15
Pacific	1.03	1.04	1.07	0.97	1.31	1.16	1.12	1.13
Type of Practice								
Solo	0.82	0.81	0.77	0.74	0.82	0.80	0.86	0.83
Non-solo	0.90	1.03	1.00	0.92	0.95	1.03	0.77	0.81
Location								
Nonmetropolitan	1.92	2.13	1.48	1.57	1.79	2.13	1.57	1.63
Metropolitan—								
Less than 1,000,000	0.96	1.12	1.15	0.99	0.93	1.18	0.92	0.91
1,000,000 and over	0.86	0.89	0.86	0.88	1.05	0.93	0.83	0.89
Physician Age								
Less than 36 years	1.68	1.71	2.37	1.64	1.75	1.57	1.53	1.55
Less than 40 years	1.10	1.17	1.23	1.16	1.26	1.53	1.10	1.04
36-45 years	1.16	1.17	1.10	1.17	1.16	1.41	0.95	0.92
46-55 years	1.40	1.61	1.45	1.28	1.59	1.48	1.36	1.30
56-65 years	1.14	1.42	1.09	0.97	1.12	1.08	1.09	1.48
66 or more years	1.28	1.24	1.30	1.77	1.33	1.43	1.49	2.18

Table 21. **Mean Number of Surgical Procedures per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	5.7	0.9	1.7	8.7	0.4	8.8
Census Division						
New England	2.7	·	0.9	7.1	0.0	·
Middle Atlantic	5.2	0.3	1.7	8.0	0.3	8.1
East North Central	4.2	1.3	1.7	10.6	0.1	8.7
West North Central	4.1	1.1	1.7	9.8	1.3	10.1
South Atlantic	5.6	0.1	2.6	9.1	0.3	7.8
East South Central	3.8	0.3	0.7	10.3	·	·
West South Central	4.0	0.7	1.4	8.0	0.8	11.6
Mountain	5.7	1.8	0.9	8.2	·	·
Pacific	5.6	1.9	1.4	7.3	0.7	8.5
Type of Practice						
Solo	5.7	1.0	1.5	7.8	0.5	8.0
Non-solo	5.7	0.8	1.7	9.4	0.4	9.2
Location						
Nonmetropolitan	5.3	0.9	1.4	10.0	·	9.8
Metropolitan—						
Less than 1,000,000	4.1	0.8	2.1	9.0	0.7	9.6
1,000,000 and over	5.5	1.1	1.5	8.1	0.3	7.8
Employment Status						
Self-employed	4.3	1.1	1.7	9.0	0.6	9.0
Non-self-employed[c]	2.3	0.5	1.5	7.0	0.3	8.3
Employee	2.3	0.4	1.5	7.3	0.2	7.7
Independent contractor	1.9	0.8	1.7	·	·	·
Physician Age						
Less than 36 years	3.0	0.6	2.1	8.4	0.4	9.8
Less than 40 years	3.3	1.1	1.8	9.2	0.5	9.8
36-45 years	5.7	1.3	1.9	9.4	0.6	9.8
46-55 years	4.4	0.9	1.2	9.0	0.4	8.8
56-65 years	3.9	0.8	1.5	8.2	0.3	7.5
66 or more years	1.7	0.4	0.1	4.8	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 21 (continued). **Standard Error of the Mean Number of Surgical Procedures per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.11	0.12	0.20	0.22	0.07	0.37
Census Division						
New England	0.41	·	0.47	0.94	0.00	·
Middle Atlantic	0.25	0.23	0.43	0.44	0.12	1.15
East North Central	0.30	0.25	0.57	0.58	0.05	1.07
West North Central	0.41	0.22	0.84	0.96	0.36	1.09
South Atlantic	0.27	0.09	0.62	0.59	0.13	0.57
East South Central	0.49	0.14	0.46	1.11	·	·
West South Central	0.34	0.21	0.50	0.57	0.35	1.30
Mountain	0.42	0.48	0.54	0.93	·	·
Pacific	0.25	0.63	0.40	0.40	0.23	1.05
Type of Practice						
Solo	0.17	0.24	0.28	0.32	0.12	0.55
Non-solo	0.14	0.10	0.27	0.30	0.09	0.49
Location						
Nonmetropolitan	0.33	0.15	0.70	0.94	·	1.03
Metropolitan—						
Less than 1,000,000	0.17	0.11	0.36	0.32	0.14	0.55
1,000,000 and over	0.15	0.34	0.25	0.31	0.07	0.56
Employment Status						
Self-employed	0.14	0.16	0.25	0.25	0.10	0.41
Non-self-employed[c]	0.16	0.12	0.34	0.44	0.10	0.83
Employee	0.18	0.11	0.37	0.46	0.10	0.89
Independent contractor	0.34	0.35	0.96	·	·	·
Physician Age						
Less than 36 years	0.28	0.12	0.64	0.66	0.16	0.87
Less than 40 years	0.21	0.31	0.42	0.45	0.12	0.77
36-45 years	0.18	0.27	0.34	0.36	0.13	0.73
46-55 years	0.23	0.26	0.33	0.37	0.14	0.72
56-65 years	0.27	0.20	0.45	0.54	0.13	0.63
66 or more years	0.25	0.12	0.12	0.83	·	·

Table 22. **Mean Number of Surgical Procedures per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	3.2	3.0	3.5	3.5	3.5	3.5	3.6	3.7
Specialty								
General/Family Practice	1.1	1.1	1.2	1.1	1.2	0.9	0.8	0.9
Internal Medicine	0.8	0.7	1.1	1.5	1.1	1.0	1.2	1.7
Surgery	7.6	7.1	8.3	8.2	8.4	8.5	8.5	8.7
Pediatrics	0.7	0.6	0.7	0.9	0.7	0.6	0.7	0.4
Obstetrics/Gynecology	7.6	7.2	8.5	8.2	8.5	8.4	9.5	8.8
Census Division								
New England	3.0	2.4	2.7	2.9	3.1	2.6	2.3	2.7
Middle Atlantic	2.9	2.7	3.0	2.7	2.8	2.8	3.1	3.2
East North Central	3.6	2.7	3.8	4.2	4.0	3.5	3.9	4.2
West North Central	4.3	3.4	3.9	4.1	3.7	3.9	4.4	4.1
South Atlantic	3.3	3.1	3.6	3.6	3.5	3.7	3.6	3.6
East South Central	3.5	3.8	4.3	3.3	3.6	4.2	4.1	3.8
West South Central	3.5	3.5	3.6	3.8	3.9	4.0	3.9	4.0
Mountain	3.0	3.7	3.9	3.9	4.6	3.7	4.1	3.7
Pacific	2.5	2.7	3.1	3.4	3.3	3.5	3.2	3.6
Type of Practice								
Solo	3.0	2.9	3.2	3.5	3.7	3.3	3.3	3.7
Non-solo	3.4	3.1	3.7	3.5	3.4	3.6	3.7	3.7
Location								
Nonmetropolitan	3.4	3.2	3.4	3.7	3.6	3.4	3.4	3.3
Metropolitan—								
Less than 1,000,000	3.7	3.3	4.1	3.8	4.1	4.1	4.0	4.1
1,000,000 and over	2.7	2.7	3.0	3.2	3.0	2.9	3.2	3.3
Physician Age								
Less than 36 years	2.3	2.0	3.1	2.8	2.4	2.5	2.5	3.0
Less than 40 years	2.7	2.6	3.2	3.2	2.8	2.7	3.2	3.3
36-45 years	3.5	3.3	3.5	3.6	3.5	3.2	3.7	3.7
46-55 years	3.7	3.7	4.3	4.5	4.3	4.5	4.3	4.4
56-65 years	3.3	2.8	3.0	3.1	3.6	3.7	3.5	3.9
66 or more years	2.0	1.5	2.5	2.3	2.4	2.2	2.0	1.7

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume.
See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 22 (continued). **Standard Error of the Mean Number of Surgical Procedures per Week, 1984-1991**[a]

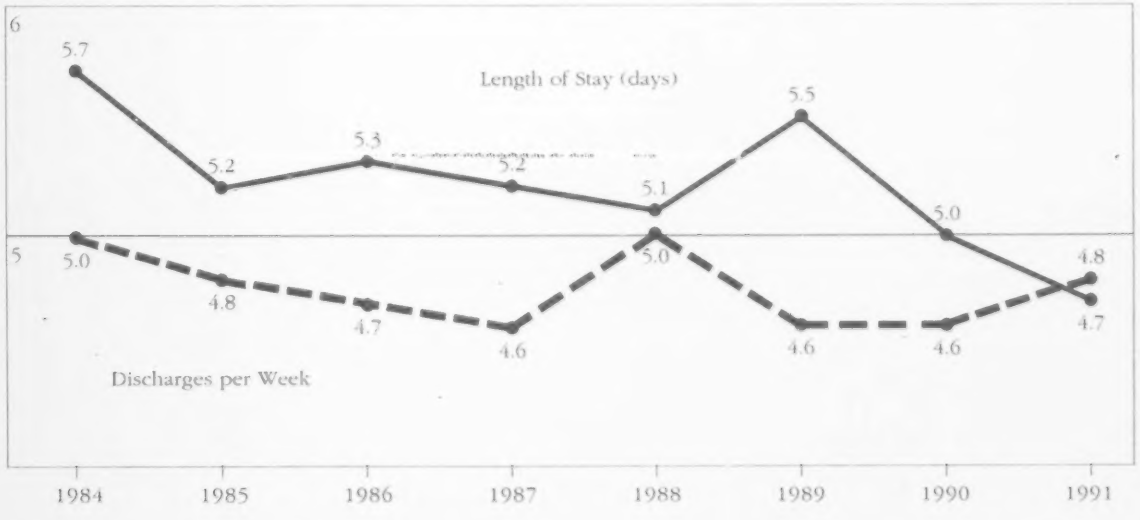
	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.10	0.09	0.11	0.11	0.10	0.10	0.11	0.11
Specialty								
General/Family Practice	0.08	0.14	0.09	0.09	0.11	0.08	0.08	0.12
Internal Medicine	0.13	0.11	0.20	0.21	0.16	0.16	0.17	0.20
Surgery	0.19	0.18	0.25	0.21	0.20	0.21	0.21	0.22
Pediatrics	0.09	0.10	0.10	0.16	0.12	0.11	0.16	0.07
Obstetrics/Gynecology	0.27	0.27	0.35	0.31	0.28	0.36	0.[illegible]	0.37
Census Division								
New England	0.43	0.35	0.43	0.40	0.44	0.32	0.33	0.41
Middle Atlantic	0.31	0.20	0.27	0.23	0.22	0.22	0.27	0.25
East North Central	0.23	0.20	0.30	0.33	0.27	0.24	0.26	0.30
West North Central	0.42	0.35	0.41	0.45	0.38	0.38	0.45	0.41
South Atlantic	0.24	0.20	0.33	0.26	0.23	0.25	0.26	0.27
East South Central	0.38	0.50	0.51	0.44	0.48	0.53	0.51	0.49
West South Central	0.28	0.40	0.28	0.29	0.28	0.34	0.33	0.34
Mountain	0.34	0.37	0.41	0.38	0.46	0.43	0.46	0.42
Pacific	0.18	0.23	0.20	0.23	0.24	0.27	0.23	0.25
Type of Practice								
Solo	0.12	0.13	0.13	0.14	0.16	0.14	0.16	0.17
Non-solo	0.16	0.13	0.17	0.15	0.13	0.14	0.14	0.14
Location								
Nonmetropolitan	0.26	0.27	0.29	0.29	0.30	0.30	0.31	0.33
Metropolitan—								
Less than 1,000,000	0.16	0.16	0.19	0.18	0.17	0.17	0.17	0.17
1,000,000 and over	0.14	0.12	0.14	0.14	0.13	0.13	0.15	0.15
Physician Age								
Less than 36 years	0.21	0.20	0.35	0.29	0.24	0.23	0.27	0.28
Less than 40 years	0.20	0.16	0.19	0.19	0.17	0.17	0.20	0.21
36-45 years	0.21	0.17	0.17	0.18	0.17	0.16	0.18	0.18
46-55 years	0.20	0.23	0.27	0.24	0.22	0.23	0.23	0.23
56-65 years	0.19	0.18	0.22	0.22	0.22	0.22	0.22	0.27
66 or more years	0.21	0.16	0.30	0.28	0.30	0.29	0.25	0.25

Hospital Utilization by Physicians

Physicians have a significant influence on the utilization of hospital resources. Two measures indicating the extent of hospital utilization of physicians' patients are the number of patients discharged from the hospital and the average length of their hospital stays.

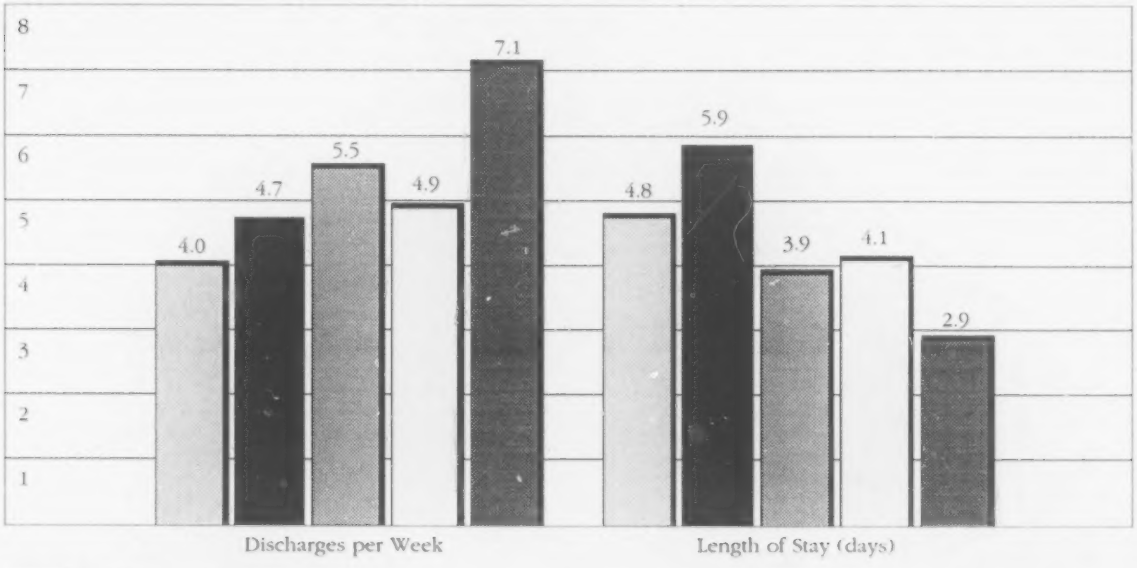
Declining hospital utilization is reflected in the trend for both the average number of discharges per physician per week and the length of stay of patients (see Figure 7). However, it appears that hospital utilization may be leveling off. Weekly discharges increased to 4.8 in 1991, the highest level since 1988. Average length of stay increased from 5.1 to 5.5 between 1988 and 1989, but declined to 4.7 in 1991. Figure 8 shows average discharge rates and lengths of stay of physicians by specialty. General/family practitioners have the fewest hospitalized patients, but their patients have the second longest average lengths of stay. At the other extreme, obstetricians/gynecologists have the most hospitalized patients and their patients have the shortest stays. Figure 9 indicates that geographic differences in average hospital lengths of stay are substantial.

Figure 7. **Average Hospital Discharges per Week and Length of Stay (in days) of Discharged Patients for all Physicians, 1984-1991**[a]



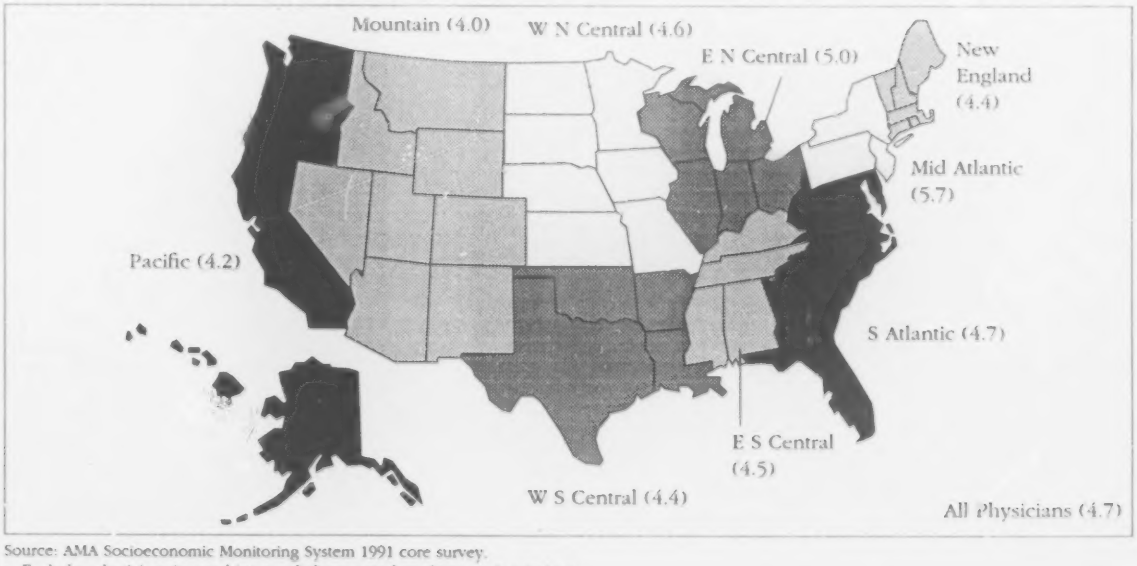
Source: 1984–1991, AMA Socioeconomic Monitoring System core surveys.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Figure 8. **Average Hospital Discharges per Week and Length of Hospital Stay (in days) of Discharged Patients, by Census Division, 1991[a]**



Source: AMA Socioeconomic Monitoring System 1990 core survey.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Figure 9. **Average Length of Hospital Stay (in days) per Discharged Patient, by Census Division, 1991[a]**



Source: AMA Socioeconomic Monitoring System 1991 core survey.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Table 23. **Mean Number of Patients Discharged from the Hospital per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	4.8	4.0	4.7	5.5	4.9	7.1
Census Division						
New England	3.6	•	3.4	5.7	3.1	•
Middle Atlantic	3.9	2.3	3.7	5.2	4.1	6.7
East North Central	5.6	4.3	4.9	6.9	7.1	6.0
West North Central	5.6	.3	5.5	5.0	6.9	11.6
South Atlantic	4.8	3.4	5.3	5.5	4.7	7.4
East South Central	6.3	6.6	5.3	9.0	•	•
West South Central	5.5	5.9	6.5	5.2	5.6	8.3
Mountain	5.6	4.5	4.7	6.4	•	•
Pacific	3.6	2.4	4.3	3.3	4.0	6.3
Type of Practice						
Solo	4.4	4.4	4.2	4.6	5.0	6.3
Non-solo	5.0	3.6	4.9	6.1	4.9	7.5
Location						
Nonmetropolitan	5.8	6.0	5.9	6.2	•	8.2
Metropolitan—						
Less than 1,000,000	5.4	3.7	5.1	6.5	5.1	7.8
1,000,000 and over	4.0	2.8	4.2	4.3	4.7	6.2
Employment Status						
Self-employed	5.2	4.5	5.2	5.3	5.5	7.6
Non-self-employed[c]	3.8	2.7	3.5	6.2	4.0	5.8
Employee	3.8	2.6	3.4	5.6	4.0	5.9
Independent contractor	3.7	2.8	3.7	•	•	•
Physician Age						
Less than 36 years	4.4	3.0	4.6	5.0	4.7	7.4
Less than 40 years	4.7	3.7	4.5	5.8	4.0	7.6
36-45 years	5.0	4.0	4.7	5.9	4.9	7.6
46-55 years	5.1	4.8	5.0	5.6	4.8	7.6
56-65 years	4.7	4.6	4.5	5.5	5.2	5.8
66 or more years	3.2	2.7	3.6	3.2	•	•

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

• Indicates fewer than 20 observations.

Table 23 (continued). **Standard Error of the Mean Number of Patients Discharged from the Hospital per Week, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.14	0.22	0.19	0.30	0.30	0.33
Census Division						
New England	0.72	·	0.55	2.58	0.55	·
Middle Atlantic	0.23	0.37	0.38	0.51	0.76	0.85
East North Central	0.42	0.42	0.40	0.62	1.15	0.70
West North Central	0.42	0.59	0.83	0.83	1.80	1.43
South Atlantic	0.34	0.45	0.51	0.61	0.53	1.04
East South Central	0.75	1.42	0.80	2.11	·	·
West South Central	0.36	0.86	0.97	0.65	0.75	0.98
Mountain	0.89	0.90	1.17	1.75	·	·
Pacific	0.27	0.37	0.49	0.38	0.53	0.64
Type of Practice						
Solo	0.18	0.39	0.30	0.44	0.41	0.51
Non-solo	0.19	0.23	0.25	0.40	0.38	0.43
Location						
Nonmetropolitan	0.37	0.61	0.85	0.67	·	1.65
Metropolitan—						
Less than 1,000,000	0.27	0.26	0.31	0.56	0.41	0.52
1,000,000 and over	0.14	0.30	0.26	0.27	0.44	0.42
Employment Status						
Self-employed	0.15	0.27	0.24	0.29	0.31	0.41
Non-self-employed[c]	0.30	0.31	0.32	1.00	0.58	0.55
Employee	0.29	0.36	0.35	0.63	0.63	0.63
Independent contractor	0.98	0.65	0.83	·	·	·
Physician Age						
Less than 36 years	0.29	0.35	0.48	0.71	0.65	0.80
Less than 40 years	0.30	0.34	0.33	0.82	0.41	0.62
36-45 years	0.27	0.33	0.32	0.57	0.45	0.60
46-55 years	0.23	0.64	0.40	0.43	0.66	0.68
56-65 years	0.32	0.61	0.46	0.84	0.84	0.62
66 or more years	0.36	0.64	0.82	0.71	·	·

Table 24. **Mean Number of Patients Discharged from the Hospital per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	5.0	4.8	4.7	4.6	5.0	4.6	4.6	4.8
Specialty								
General/Family Practice	4.0	3.9	3.5	3.5	3.6	3.4	3.5	4.0
Internal Medicine	4.6	4.7	4.8	4.8	5.3	5.2	4.6	4.7
Surgery	6.1	5.4	5.3	5.5	5.5	5.1	4.8	5.5
Pediatrics	5.7	5.1	6.1	5.8	4.9	5.5	6.3	4.9
Obstetrics/Gynecology	6.7	6.8	7.4	7.0	7.4	7.5	7.8	7.1
Census Division								
New England	4.0	3.7	4.2	3.5	3.9	3.6	4.3	3.6
Middle Atlantic	4.2	4.5	4.6	4.2	4.4	4.2	3.8	3.9
East North Central	6.3	5.2	5.0	4.5	4.9	4.7	4.7	5.6
West North Central	5.7	5.8	4.7	5.4	5.3	5.1	5.5	5.6
South Atlantic	5.1	4.9	5.0	4.9	5.4	5.3	4.8	4.8
East South Central	6.5	7.0	7.0	6.4	6.8	6.5	5.8	6.3
West South Central	5.8	5.9	5.6	5.0	5.6	5.3	5.1	5.5
Mountain	5.0	4.6	4.0	4.5	4.6	4.3	3.8	5.6
Pacific	5.4	5.4	5.4	5.9	4.4	3.6	4.1	5.6
Type of Practice								
Solo	4.4	4.2	4.3	4.2	4.5	4.1	4.1	4.4
Non-solo	5.5	5.2	5.1	4.9	5.3	5.0	4.9	5.0
Location								
Nonmetropolitan	6.8	6.1	5.5	6.0	5.6	6.0	5.5	5.8
Metropolitan—								
Less than 1,000,000	5.3	4.9	5.5	5.0	5.2	5.1	4.9	5.4
1,000,000 and over	4.3	4.3	3.9	3.9	4.6	3.9	4.1	4.0
Physician Age								
Less than 36 years	4.8	5.5	4.4	5.8	4.6	3.7	4.2	4.4
Less than 40 years	5.3	5.1	4.5	4.5	5.0	4.5	4.5	4.7
36-45 years	5.5	4.9	5.0	5.0	5.4	5.0	4.8	5.0
46-55 years	5.3	5.0	5.2	5.5	5.4	5.0	5.1	5.1
56-65 years	4.5	4.4	4.1	4.2	4.5	4.5	4.2	4.7
66 or more years	3.0	2.9	4.2	2.8	2.9	3.0	2.9	3.2

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume.
See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 24 (continued). **Standard Error of the Mean Number of Patients Discharged from the Hospital per Week, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.14	0.15	0.14	0.13	0.14	0.11	0.12	0.14
Specialty								
General/Family Practice	0.18	0.21	0.17	0.21	0.16	0.16	0.23	0.22
Internal Medicine	0.20	0.34	0.21	0.30	0.25	0.28	0.23	0.19
Surgery	0.19	0.19	0.22	0.20	0.23	0.18	0.16	0.30
Pediatrics	0.43	0.32	0.57	0.58	0.30	0.29	0.56	0.30
Obstetrics/Gynecology	0.33	0.33	0.46	0.35	0.31	0.39	0.47	0.33
Census Division								
New England	0.38	0.40	0.70	0.34	0.46	0.42	0.81	0.72
Middle Atlantic	0.26	0.35	0.48	0.36	0.33	0.25	0.21	0.23
East North Central	0.62	0.55	0.24	0.24	0.24	0.22	0.29	0.42
West North Central	0.33	0.59	0.45	0.40	0.33	0.35	0.44	0.42
South Atlantic	0.31	0.31	0.37	0.38	0.47	0.29	0.35	0.34
East South Central	0.53	0.54	0.67	0.62	0.72	0.59	0.42	0.75
West South Central	0.32	0.55	0.44	0.38	0.41	0.37	0.34	0.36
Mountain	0.68	0.39	0.37	0.41	0.44	0.42	0.38	0.89
Pacific	0.17	0.18	0.21	0.32	0.33	0.23	0.34	0.27
Type of Practice								
Solo	0.13	0.14	0.15	0.14	0.15	0.15	0.16	0.18
Non-solo	0.25	0.25	0.22	0.20	0.21	0.15	0.18	0.19
Location								
Nonmetropolitan	0.36	0.37	0.34	0.42	0.30	0.35	0.33	0.37
Metropolitan—								
Less than 1,000,000	0.17	0.20	0.24	0.21	0.24	0.17	0.19	0.27
1,000,000 and over	0.25	0.24	0.19	0.18	0.19	0.14	0.18	0.14
Physician Age								
Less than 36 years	0.47	0.58	0.29	0.31	0.42	0.23	0.33	0.29
Less than 40 years	0.37	0.36	0.22	0.25	0.27	0.18	0.24	0.30
36-45 years	0.33	0.29	0.25	0.27	0.29	0.19	0.22	0.27
46-55 years	0.22	0.21	0.25	0.26	0.26	0.21	0.25	0.23
56-65 years	0.18	0.25	0.27	0.22	0.21	0.26	0.28	0.32
66 or more years	0.22	0.22	0.67	0.20	0.23	0.23	0.25	0.36

Table 25. **Mean Number of Days for Hospital Stays per Patient, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	4.7	4.8	5.9	3.9	4.1	2.9
Census Division						
New England	4.4	·	5.7	3.5	·	·
Middle Atlantic	5.7	5.8	7.2	4.5	4.7	3.4
East North Central	5.0	5.9	5.7	3.7	4.7	3.1
West North Central	4.6	4.2	5.7	3.1	·	3.2
South Atlantic	4.7	5.0	5.8	4.1	3.3	2.9
East South Central	4.5	4.3	5.7	3.9	·	·
West South Central	4.4	4.7	5.8	4.4	2.8	2.5
Mountain	4.0	3.6	·	4.1	·	·
Pacific	4.2	4.2	5.3	3.4	4.5	2.6
Type of Practice						
Solo	4.4	4.6	6.0	3.8	2.9	2.6
Non-solo	4.9	5.0	5.9	4.0	4.7	3.1
Location						
Nonmetropolitan	4.5	5.0	5.6	3.2	·	·
Metropolitan—						
Less than 1,000,000	4.8	4.5	5.7	4.2	4.6	3.0
1,000,000 and over	4.8	5.1	6.1	3.7	3.8	3.0
Employment Status						·
Self-employed	4.4	4.4	5.8	3.8	3.4	2.7
Non-self-employed[c]	5.8	6.2	6.2	4.3	5.8	3.5
Employee	5.9	6.7	6.2	4.3	5.9	3.6
Independent contractor	5.2	·	·	·	·	·
Physician Age						
Less than 36 years	5.1	4.8	5.9	3.7	3.9	2.6
Less than 40 years	4.9	4.5	6.1	4.0	3.8	2.6
36-45 years	4.9	5.2	5.8	4.0	4.4	2.9
46-55 years	4.5	4.5	6.2	3.7	4.3	3.1
56-65 years	4.4	4.4	5.9	3.9	3.7	2.8
66 or more years	4.6	4.9	5.5	4.6	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 25 (continued). **Standard Error of the Mean Number of Days for Hospital Stays per Patient, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.09	0.28	0.13	0.11	0.36	0.11
Census Division						
New England	0.33	·	0.44	0.40	·	·
Middle Atlantic	0.24	0.56	0.44	0.28	0.91	0.44
East North Central	0.31	1.39	0.28	0.21	0.85	0.41
West North Central	0.36	0.52	0.34	0.35	·	0.43
South Atlantic	0.16	0.36	0.28	0.27	0.22	0.12
East South Central	0.25	0.18	0.49	0.40	·	·
West South Central	0.20	0.29	0.35	0.38	0.16	0.13
Mountain	0.26	0.26	·	0.41	·	·
Pacific	0.25	0.36	0.30	0.34	1.39	0.17
Type of Practice						
Solo	0.10	0.16	0.22	0.19	0.10	0.10
Non-solo	0.14	0.50	0.17	0.13	0.51	0.17
Location						
Nonmetropolitan	0.47	0.93	0.57	0.19	·	·
Metropolitan—						
Less than 1,000,000	0.12	0.16	0.21	0.17	0.54	0.17
1,000,000 and over	0.13	0.30	0.19	0.16	0.52	0.17
Employment Status						
Self-employed	0.07	0.11	0.14	0.12	0.28	0.10
Non-self-employed[c]	0.31	1.28	0.37	0.29	0.97	0.30
Employee	0.35	1.60	0.40	0.31	1.02	0.36
Independent contractor	0.55	·	·	·	·	·
Physician Age						
Less than 36 years	0.28	0.33	0.39	0.33	0.84	0.10
Less than 40 years	0.16	0.20	0.27	0.24	0.50	0.08
36-45 years	0.17	0.66	0.21	0.20	0.53	0.25
46-55 years	0.16	0.26	0.26	0.16	0.98	0.22
56-65 years	0.15	0.21	0.34	0.21	0.57	0.15
66 or more years	0.32	0.52	0.34	0.98	·	·

Table 26. **Mean Number of Days for Hospital Stays per Patient, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	5.7	5.2	5.3	5.2	5.1	5.5	5.0	4.7
Specialty								
General/Family Practice	5.2	5.1	5.3	5.4	5.2	5.4	5.3	4.8
Internal Medicine	7.4	6.5	6.6	6.4	6.4	6.2	6.2	5.9
Surgery	4.4	4.3	4.0	4.2	4.1	4.2	4.1	3.9
Pediatrics	5.1	4.5	4.7	5.9	4.6	8.2	4.2	4.1
Obstetrics/Gynecology	3.8	3.4	3.5	3.3	3.1	3.2	3.1	2.9
Census Division								
New England	7.1	5.2	5.5	5.1	4.6	5.3	4.8	4.4
Middle Atlantic	6.6	5.8	6.1	5.5	5.9	8.1	6.3	5.7
East North Central	5.5	5.7	5.5	6.9	4.9	5.4	5.1	5.0
West North Central	5.2	5.1	4.8	5.4	6.2	4.4	4.8	4.6
South Atlantic	6.1	5.2	5.4	4.8	4.5	5.0	5.0	4.7
East South Central	5.8	5.9	6.5	5.9	4.8	5.0	4.7	4.5
West South Central	5.9	4.5	4.7	4.3	6.0	4.5	4.9	4.4
Mountain	4.7	4.1	4.5	4.1	4.1	4.9	4.1	4.0
Pacific	4.4	4.4	4.4	4.2	4.8	4.5	4.0	4.2
Type of Practice								
Solo	5.1	4.8	4.8	4.8	4.6	4.8	5.0	4.4
Non-solo	6.3	5.5	5.6	5.6	5.5	5.9	5.0	4.9
Location								
Nonmetropolitan	4.6	4.4	4.9	4.6	4.5	4.1	4.7	4.5
Metropolitan—								
Less than 1,000,000	5.4	5.2	5.4	5.6	4.8	6.1	4.9	4.8
1,000,000 and over	6.3	5.4	5.3	5.0	5.6	5.2	5.2	4.8
Physician Age								
Less than 36 years	5.3	5.0	5.1	4.7	5.0	4.9	5.6	5.1
Less than 40 years	5.3	5.1	5.3	5.0	5.1	6.8	5.3	4.9
36-45 years	5.9	5.2	5.2	5.5	5.2	6.2	5.0	4.9
46-55 years	5.6	5.0	5.2	5.1	5.3	5.0	4.8	4.5
56-65 years	5.4	5.1	5.2	4.9	4.8	5.0	4.6	4.4
66 or more years	6.8	5.7	6.5	5.6	5.3	4.9	5.7	4.6

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 26 (continued). **Standard Error of the Mean Number of Days for Hospital Stays per Patient, 1984-1991**[a]

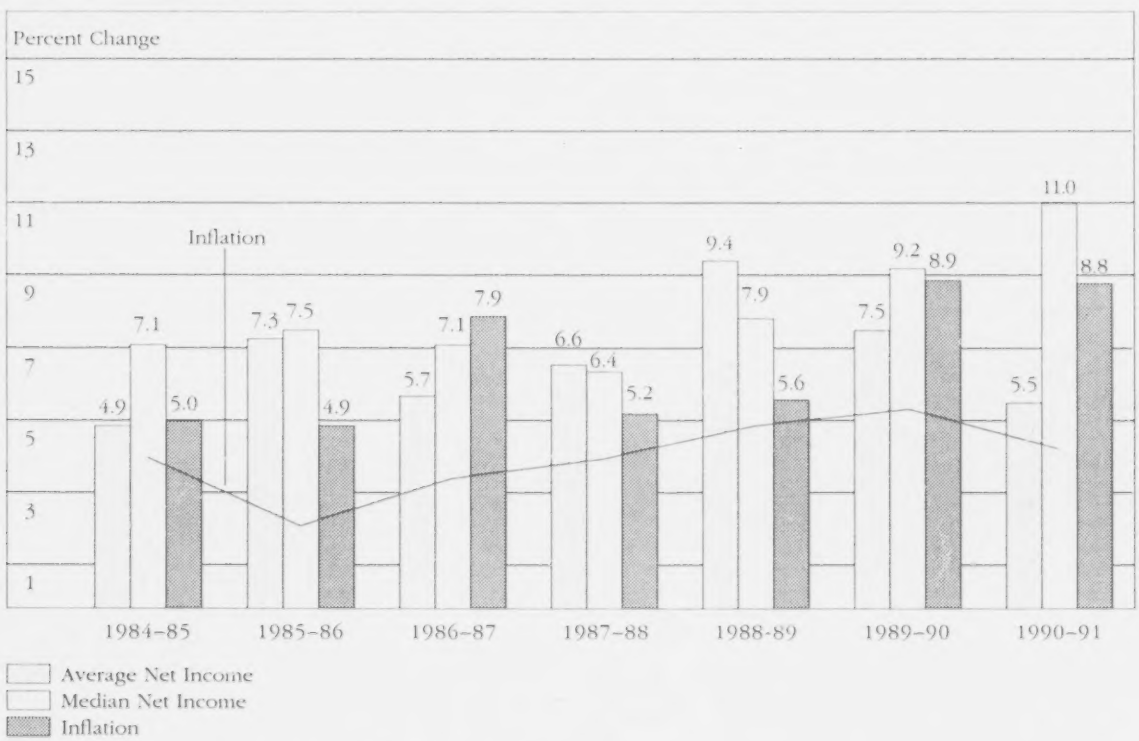
	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.18	0.10	0.14	0.20	0.16	0.45	0.12	0.09
Specialty								
General/Family Practice	0.18	0.19	0.21	0.40	0.34	0.37	0.28	0.28
Internal Medicine	0.48	0.18	0.26	0.26	0.41	0.25	0.21	0.13
Surgery	0.10	0.14	0.10	0.11	0.10	0.13	0.11	0.11
Pediatrics	0.65	0.43	0.62	1.48	0.65	3.64	0.34	0.36
Obstetrics/Gynecology	0.08	0.07	0.14	0.07	0.06	0.06	0.16	0.11
Census Division								
New England	1.18	0.44	0.57	0.45	0.20	0.50	0.39	0.33
Middle Atlantic	0.31	0.30	0.45	0.20	0.38	2.60	0.43	0.24
East North Central	0.22	0.30	0.26	1.08	0.19	0.36	0.34	0.31
West North Central	0.28	0.37	0.29	0.65	0.75	0.26	0.32	0.36
South Atlantic	0.55	0.22	0.35	0.14	0.12	0.24	0.20	0.16
East South Central	0.58	0.53	1.11	0.89	0.27	0.40	0.31	0.25
West South Central	1.00	0.15	0.22	0.20	1.01	0.30	0.40	0.20
Mountain	0.64	0.24	0.36	0.34	0.36	0.67	0.28	0.26
Pacific	0.21	0.24	0.18	0.16	0.41	0.41	0.20	0.25
Type of Practice								
Solo	0.10	0.11	0.10	0.15	0.17	0.15	0.20	0.10
Non-solo	0.35	0.17	0.24	0.34	0.24	0.75	0.14	0.14
Location								
Nonmetropolitan	0.09	0.12	0.34	0.40	0.38	0.11	0.42	0.47
Metropolitan—								
Less than 1,000,000	0.25	0.17	0.23	0.42	0.15	0.98	0.14	0.12
1,000,000 and over	0.33	0.16	0.19	0.12	0.30	0.18	0.19	0.13
Physician Age								
Less than 36 years	0.37	0.21	0.32	0.23	0.30	0.30	0.64	0.28
Less than 40 years	0.20	0.17	0.25	0.17	0.20	1.56	0.27	0.16
36-45 years	0.39	0.20	0.22	0.47	0.28	1.14	0.19	0.17
46-55 years	0.33	0.19	0.23	0.23	0.36	0.21	0.17	0.16
56-65 years	0.20	0.22	0.26	0.15	0.24	0.37	0.18	0.15
66 or more years	0.87	0.30	0.89	0.67	0.64	0.23	0.49	0.32

Fees for Physician Visits

Office visits with new and established patients and follow-up hospital visits are the most commonly billed physician services and account for a large proportion of physician revenue. Fees reported for these services are "current usual fees" and, therefore, may not reflect discounts allowed under some circumstances, such as assigned Medicare services and services to patients covered by preferred provider organization contracts.

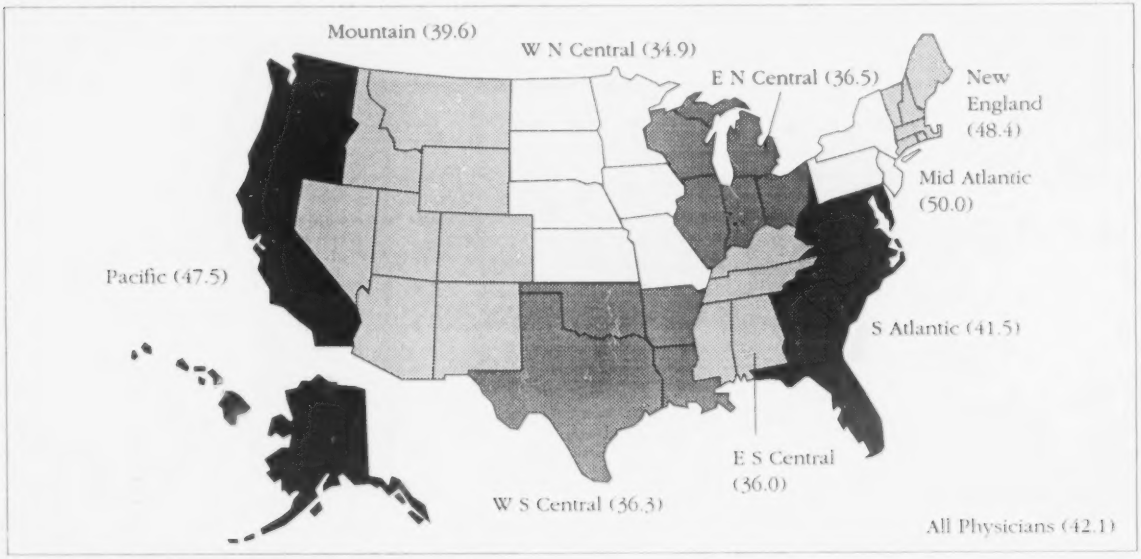
As shown in Figure 10, fees for all three types of visits increased faster than the 4.2% rate of inflation (measured by the All Items Consumer Price Index for Urban Consumers) from 1990 to 1991. Figure 11 indicates that in 1991 the average fee for an established patient office visit reached $42.1 for the entire nation, but ranged from $34.9 in the West North Central states to $50.0 in the Middle Atlantic states. Variations in relative fees by type of visit and specialty, using the national average established patient office visit fee as the base of comparison, are shown in Figure 12.

Figure 10. **Percent Change in Average Fees for Selected Types of Visits for of All Physicians, 1984–1991**[a]



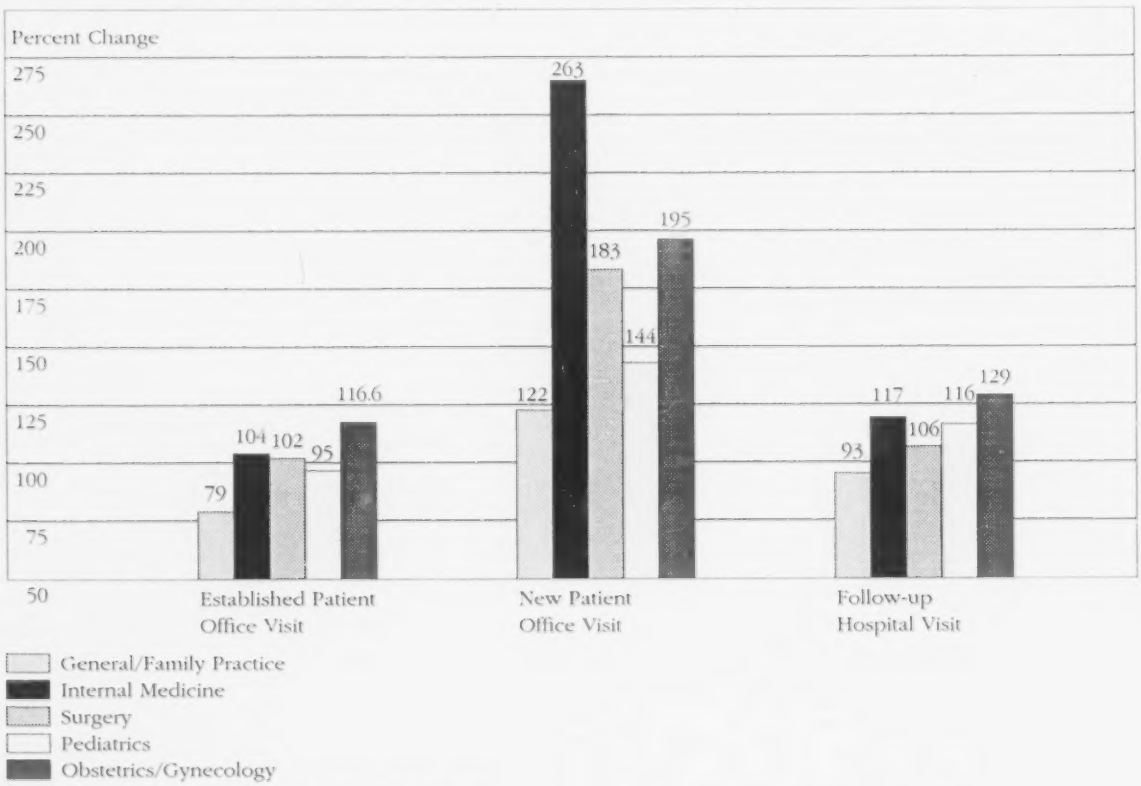
Source: AMA Socioeconomic Monitoring System 1984–1991 core surveys.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Figure 11. **Average Fee (in dollars) for an Established Patient Office Visit, by Census Division, 1991[a]**



Source: AMA Socioeconomic Monitoring System 1991 core survey.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Figure 12. **Average Fees by Type of Visit and Specialty as a Percent of the Average Fee for an Established Patient Office Visit for All Physicians, 1991[a]**



Source: AMA Socioeconomic Monitoring System 1991 core survey.
a. Excludes physicians in psychiatry, radiology, anesthesiology, and pathology.

Table 27. **Mean Fee (in dollars) for an Office Visit with an Established Patient, 1991[a]**

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	42.08	33.35	43.72	42.74	40.02	49.07
Census Division						
New England	48.43	·	46.29	48.60	·	·
Middle Atlantic	49.97	36.13	48.12	52.91	48.22	61.63
East North Central	36.53	29.96	38.55	35.19	34.56	44.54
West North Central	34.94	27.54	40.48	36.27	·	40.40
South Atlantic	41.45	35.90	41.60	43.94	39.31	46.98
East South Central	36.04	29.41	39.19	36.28	·	·
West South Central	36.31	30.97	40.54	34.00	33.77	42.01
Mountain	39.59	33.64	·	40.69	·	·
Pacific	47.51	39.50	49.54	48.86	43.44	55.55
Type of Practice						
Solo	41.96	32.84	44.14	42.82	38.41	50.13
Non-solo	42.17	33.88	43.45	42.66	40.84	48.34
Location						
Nonmetropolitan	31.67	28.36	34.54	32.18	·	38.83
Metropolitan—						
Less than 1,000,000	39.07	33.57	40.10	38.94	37.64	45.78
1,000,000 and over	47.39	36.94	47.85	48.99	42.26	54.54
Employment Status						
Self-employed	41.54	33.43	43.38	41.79	38.03	49.55
Non-self-employed[c]	44.23	33.02	44.95	49.62	46.45	47.25
Employee	44.25	33.01	45.10	47.98	45.59	49.72
Independent contractor	44.14	33.06	44.21	·	·	·
Physician Age						
Less than 36 years	42.62	34.50	44.90	47.22	42.11	42.22
Less than 40 years	43.08	34.37	44.22	44.86	43.49	46.59
36-45 years	42.05	34.51	42.76	42.21	40.40	49.37
46-55 years	42.55	33.55	43.66	42.15	37.39	52.07
56-65 years	41.84	31.63	46.17	42.24	43.07	49.24
66 or more years	39.86	30.39	42.92	45.72	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 27 (continued). **Standard Error of the Mean Fee (in dollars) for an Office Visit with an Established Patient, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.35	0.51	0.67	0.72	1.08	1.25
Census Division						
New England	1.67	·	3.13	3.15	·	·
Middle Atlantic	1.21	2.06	1.77	2.45	4.67	4.86
East North Central	0.68	1.02	1.13	1.51	1.09	2.56
West North Central	1.21	1.04	4.69	1.95	·	3.01
South Atlantic	0.70	0.94	1.35	1.36	1.93	2.05
East South Central	0.92	2.00	1.94	1.47	·	·
West South Central	0.85	1.41	2.01	1.54	1.16	3.41
Mountain	1.55	2.07	·	3.48	·	·
Pacific	0.81	1.17	1.51	1.75	1.70	2.49
Type of Practice						
Solo	0.56	0.77	1.10	1.11	1.30	2.15
Non-solo	0.46	0.67	0.85	0.95	1.46	1.52
Location						
Nonmetropolitan	0.67	0.81	2.03	1.37	·	2.40
Metropolitan—						
Less than 1,000,000	0.45	0.74	0.88	0.84	1.60	1.48
1,000,000 and over	0.59	0.98	1.00	1.25	1.54	2.15
Employment Status						
Self-employed	0.38	0.58	0.73	0.74	0.79	1.38
Non-self-employed[c]	0.91	1.05	1.65	2.42	3.57	2.93
Employee	1.00	1.16	1.90	2.41	3.59	3.51
Independent contractor	2.20	2.38	2.88	·	·	·
Physician Age						
Less than 36 years	1.05	1.24	1.97	2.81	4.24	2.55
Less than 40 years	0.70	0.86	1.33	1.78	2.72	1.91
36-45 years	0.54	0.78	1.04	1.20	1.37	1.83
46-55 years	0.70	1.62	1.17	1.16	1.75	2.91
56-65 years	0.91	0.97	1.82	1.83	2.98	2.61
66 or more years	1.43	1.56	3.30	3.32	·	·

Table 28. **Mean Fee (in dollars) for an Office Visit with an Established Patient, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	26.74	28.05	30.10	31.82	33.91	37.09	39.87	42.08
Specialty								
General/Family Practice	20.76	22.06	23.48	24.52	26.46	28.95	31.24	33.35
Internal Medicine	30.37	30.43	34.03	34.11	36.50	39.26	42.75	43.72
Surgery	26.07	28.73	29.66	32.51	33.93	37.15	39.60	42.74
Pediatrics	24.65	25.13	27.57	31.57	30.01	32.34	35.73	40.02
Obstetrics/Gynecology	31.49	32.41	34.81	36.65	40.95	46.05	49.80	49.07
Census Division								
New England	28.53	30.10	33.14	34.59	37.56	43.82	44.97	48.43
Middle Atlantic	30.46	32.51	34.85	37.13	40.44	42.73	46.35	49.97
East North Central	23.70	24.90	27.33	27.37	28.61	32.11	35.92	36.53
West North Central	21.87	21.75	24.06	26.28	28.69	31.19	32.24	34.94
South Atlantic	25.76	27.11	29.69	30.64	33.93	37.20	40.36	41.45
East South Central	21.14	23.13	23.55	26.86	26.94	30.35	32.26	36.04
West South Central	26.43	25.72	28.46	30.25	30.25	33.86	36.73	36.31
Mountain	24.58	25.39	27.05	29.24	32.01	32.56	40.15	39.59
Pacific	31.52	33.61	34.93	37.52	38.79	41.96	45.59	47.51
Type of Practice								
Solo	26.38	27.96	29.54	31.54	33.18	36.44	39.59	41.96
Non-solo	27.16	28.16	30.67	32.09	34.56	37.66	40.10	42.17
Location								
Nonmetropolitan	19.39	20.70	22.11	23.04	24.28	27.05	29.36	31.67
Metropolitan—								
Less than 1,000,000	25.26	25.44	27.50	29.51	31.10	34.52	36.63	39.07
1,000,000 and over	30.09	32.21	34.73	36.38	38.77	41.90	45.71	47.39
Physician Age								
Less than 36 years	25.76	27.94	28.53	29.94	33.95	37.45	40.50	42.62
Less than 40 years	27.20	28.76	30.10	31.20	33.99	36.86	39.85	43.08
36-45 years	27.99	28.92	30.89	31.93	34.07	37.17	40.18	42.05
46-55 years	26.82	27.42	30.13	32.35	35.05	37.73	39.88	42.55
56-65 years	25.89	28.35	31.13	31.88	33.59	36.46	40.50	41.84
66 or more years	24.81	26.07	26.85	31.96	30.79	36.03	36.34	39.86

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume.
See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 28 (continued). **Standard Error of the Mean Fee (in dollars) for an Office Visit with an Established Patient, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.24	0.26	0.29	0.26	0.31	0.35	0.37	0.35
Specialty								
General/Family Practice	0.30	0.29	0.31	0.31	0.39	0.39	0.45	0.51
Internal Medicine	0.67	0.60	0.83	0.59	0.75	0.88	0.80	0.67
Surgery	0.41	0.57	0.52	0.47	0.49	0.60	0.62	0.72
Pediatrics	0.53	0.50	0.61	0.88	0.62	0.64	0.89	1.08
Obstetrics/Gynecology	0.73	0.65	0.75	0.81	0.87	1.11	1.33	1.25
Census Division								
New England	0.99	1.57	1.19	0.99	1.13	1.74	1.51	1.67
Middle Atlantic	0.70	0.85	0.76	0.78	1.17	0.96	1.08	1.21
East North Central	0.47	0.62	0.88	0.54	0.47	0.60	0.57	0.68
West North Central	0.74	0.60	0.73	0.82	0.87	1.19	0.95	1.21
South Atlantic	0.47	0.51	0.69	0.51	0.61	0.77	1.02	0.70
East South Central	0.62	0.79	0.81	0.91	0.61	0.86	0.87	0.92
West South Central	0.82	0.52	0.58	0.71	0.69	0.78	1.08	0.85
Mountain	0.95	0.80	0.78	0.79	0.92	0.94	1.69	1.55
Pacific	0.73	0.69	0.74	0.78	0.71	1.25	0.95	0.81
Type of Practice								
Solo	0.33	0.37	0.42	0.38	0.39	0.48	0.52	0.56
Non-solo	0.36	0.37	0.39	0.37	0.46	0.51	0.52	0.46
Location								
Nonmetropolitan	0.41	0.42	0.41	0.42	0.38	0.61	0.67	0.67
Metropolitan—								
Less than 1,000,000	0.34	0.29	0.36	0.35	0.33	0.42	0.46	0.45
1,000,000 and over	0.39	0.45	0.49	0.43	0.55	0.62	0.63	0.59
Physician Age								
Less than 36 years	0.70	0.59	0.61	0.65	0.87	0.96	1.08	1.05
Less than 40 years	0.47	0.48	0.46	0.46	0.51	0.60	0.66	0.70
36-45 years	0.48	0.46	0.45	0.44	0.46	0.53	0.64	0.54
46-55 years	0.48	0.49	0.59	0.55	0.77	0.64	0.70	0.70
56-65 years	0.47	0.69	0.93	0.61	0.63	0.76	0.91	0.91
66 or more years	0.66	0.80	0.69	0.94	0.78	1.91	0.98	1.43

Table 29. **Mean Fee (in dollars) for an Office Visit with a New Patient, 1991**[a]

	All Physicians[b]	Specialty				
		General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	83.04	51.18	110.45	77.13	60.58	81.93
Census Division						
New England	85.43	·	99.36	73.98	·	·
Middle Atlantic	97.02	49.60	113.93	94.26	71.30	95.08
East North Central	68.39	45.56	87.65	57.95	66.68	65.25
West North Central	63.02	43.62	84.04	66.79	·	64.42
South Atlantic	83.34	55.16	110.42	76.85	54.49	75.82
East South Central	69.84	43.82	109.78	56.81	·	·
West South Central	70.65	42.09	106.44	60.42	45.96	88.00
Mountain	75.29	50.04	110.51	76.36	·	·
Pacific	104.58	65.76	144.35	98.97	60.22	101.36
Type of Practice						
Solo	81.54	49.74	112.16	74.24	52.83	87.46
Non-solo	84.13	52.70	109.38	79.51	64.36	78.10
Location						
Nonmetropolitan	53.90	43.82	78.86	48.88	·	62.97
Metropolitan—						
Less than 1,000,000	74.77	49.19	101.61	67.91	61.00	72.77
1,000,000 and over	97.79	60.02	121.67	92.52	61.65	95.06
Employment Status						
Self-employed	81.90	51.49	112.55	73.89	54.31	80.62
Non-self-employed[c]	87.32	50.08	103.21	100.11	79.83	86.63
Employee	88.74	49.32	103.28	95.62	80.84	93.33
Independent contractor	81.62	52.48	102.85	·	·	·
Physician Age						
Less than 36 years	80.06	52.35	105.22	82.02	54.30	74.27
Less than 40 years	84.06	53.70	106.51	80.58	64.67	76.49
36-45 years	85.61	54.30	109.18	76.75	70.90	77.88
46-55 years	83.70	50.89	110.88	75.99	50.84	92.16
56-65 years	82.18	46.27	125.59	77.26	63.86	79.02
66 or more years	72.56	48.21	95.46	80.11	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 29 (continued). **Standard Error of the Mean Fee (in dollars) for an Office Visit with a New Patient, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	1.09	1.24	2.29	1.91	2.53	3.43
Census Division						
New England	3.74	·	7.08	5.23	·	·
Middle Atlantic	2.95	3.52	5.12	5.09	9.19	8.18
East North Central	1.89	2.32	3.91	2.33	7.58	5.13
West North Central	2.90	3.23	8.37	5.66	·	7.95
South Atlantic	2.34	2.85	5.49	4.21	4.21	5.22
East South Central	3.23	2.97	8.34	3.03	·	·
West South Central	3.68	2.43	6.23	3.56	1.92	23.46
Mountain	4.27	5.10	14.74	7.08	·	·
Pacific	3.50	4.24	6.57	6.56	4.48	7.10
Type of Practice						
Solo	1.77	1.84	3.83	2.49	2.59	7.38
Non-solo	1.37	1.65	2.86	2.78	3.46	2.82
Location						
Nonmetropolitan	1.83	2.09	6.48	2.33	·	3.55
Metropolitan—						
Less than 1,000,000	1.27	1.40	2.82	2.08	4.16	2.55
1,000,000 and over	1.92	2.99	3.59	3.47	3.45	6.88
Employment Status						
Self-employed	1.23	1.45	2.61	1.95	2.12	4.03
Non-self-employed[c]	2.35	2.38	4.73	6.44	7.03	6.24
Employee	2.61	2.74	5.25	5.70	7.72	7.39
Independent contractor	5.44	4.86	10.96	·	·	·
Physician Age						
Less than 36 years	2.67	3.21	6.02	5.36	4.59	7.13
Less than 40 years	1.84	2.32	4.04	3.59	4.44	4.12
36-45 years	1.58	2.09	3.26	2.54	4.62	3.51
46-55 years	2.41	3.21	4.42	3.66	3.71	9.55
56-65 years	3.11	2.35	8.16	5.37	9.05	4.08
66 or more years	3.73	3.46	8.12	7.73	·	·

Table 30. **Mean Fee (in dollars) for an Office Visit with a New Patient, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	48.43	51.87	55.75	59.69	63.51	68.52	74.84	83.04
Specialty								
General/Family Practice	29.98	31.72	34.61	36.19	38.51	41.92	44.66	51.18
Internal Medicine	68.95	74.00	79.19	83.45	86.89	93.54	101.37	110.45
Surgery	44.49	48.28	50.20	53.95	59.70	63.65	68.86	77.13
Pediatrics	35.37	34.55	40.00	48.29	44.69	45.64	54.27	60.58
Obstetrics/Gynecology	46.85	51.62	52.98	56.61	61.60	69.54	76.06	81.93
Census Division								
New England	48.00	49.91	52.24	63.82	65.52	74.10	79.57	85.43
Middle Atlantic	54.26	58.65	65.62	68.40	73.44	81.58	90.15	97.02
East North Central	43.28	42.68	47.55	50.64	51.45	55.86	62.70	68.39
West North Central	36.10	43.28	43.07	51.07	51.58	50.57	54.47	63.02
South Atlantic	46.78	49.13	54.96	58.29	65.13	70.52	74.71	83.34
East South Central	34.75	41.57	39.79	48.63	48.15	57.55	58.92	69.84
West South Central	46.06	49.96	51.86	51.71	53.58	60.36	68.13	70.65
Mountain	44.53	44.69	49.52	55.24	62.90	64.81	67.87	75.29
Pacific	63.15	68.86	73.80	75.75	81.09	81.97	92.13	104.58
Type of Practice								
Solo	46.53	50.73	54.71	58.24	61.29	66.97	74.04	81.54
Non-solo	50.62	53.13	56.81	61.04	65.51	69.88	75.50	84.13
Location								
Nonmetropolitan	32.23	32.28	34.95	37.02	39.83	42.82	45.46	53.90
Metropolitan—								
Less than 1,000,000	45.01	47.93	50.43	55.85	57.41	64.58	69.05	74.77
1,000,000 and over	55.95	60.36	66.34	69.30	74.61	78.45	87.66	97.79
Physician Age								
Less than 36 years	47.02	52.30	53.50	53.98	63.78	65.81	71.57	80.96
Less than 40 years	49.67	54.05	56.08	58.76	63.97	68.69	73.65	84.06
36-45 years	51.75	54.02	58.14	61.63	67.00	71.68	76.79	85.61
46-55 years	48.43	52.27	55.06	61.66	65.48	71.83	76.64	83.07
56-65 years	45.01	49.41	57.93	58.50	60.00	63.44	70.69	82.18
66 or more years	44.23	46.97	45.96	54.88	50.76	58.66	72.41	72.56

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume.
See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 30 (continued). **Standard Error of the Mean Fee (in dollars) for an Office Visit with a New Patient, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.64	0.72	0.81	0.79	0.81	0.87	1.00	1.09
Specialty								
General/Family Practice	0.69	0.72	0.99	0.86	0.92	0.90	0.88	1.24
Internal Medicine	1.89	2.22	2.12	2.01	1.88	2.21	2.31	2.29
Surgery	0.90	1.01	1.09	1.14	1.32	1.26	1.56	1.91
Pediatrics	1.23	1.17	2.15	2.18	1.64	1.56	2.60	2.53
Obstetrics/Gynecology	0.99	1.11	1.20	1.16	1.22	1.63	3.13	3.43
Census Division								
New England	2.35	2.52	2.47	4.31	2.59	2.92	4.00	3.74
Middle Atlantic	1.88	1.88	2.25	2.13	2.43	2.43	3.01	2.95
East North Central	1.33	1.37	1.61	1.58	1.44	1.46	1.88	1.89
West North Central	1.77	2.53	2.26	2.51	2.38	2.63	2.60	2.90
South Atlantic	1.43	1.44	2.00	1.69	1.78	2.15	2.23	2.34
East South Central	1.52	2.48	1.88	2.23	2.07	3.31	2.56	3.23
West South Central	1.83	2.60	2.23	2.13	1.81	2.42	2.86	3.68
Mountain	2.31	2.20	2.59	2.64	3.40	5.03	3.79	4.27
Pacific	1.99	2.17	2.66	2.47	2.89	2.33	3.17	3.50
Type of Practice								
Solo	0.85	0.97	1.16	1.15	1.12	1.32	1.59	1.77
Non-solo	0.98	1.07	1.14	1.10	1.16	1.15	1.28	1.37
Location								
Nonmetropolitan	1.05	0.96	1.38	1.10	1.39	1.37	1.41	1.83
Metropolitan—								
Less than 1,000,000	0.83	0.98	0.97	1.10	0.95	1.18	1.25	1.27
1,000,000 and over	1.11	1.19	1.42	1.30	1.42	1.44	1.75	1.92
Physician Age								
Less than 36 years	1.90	1.85	2.30	1.99	2.35	2.43	2.70	2.67
Less than 40 years	1.20	1.26	1.33	1.32	1.43	1.57	1.71	1.84
36-45 years	1.20	1.20	1.22	1.30	1.32	1.43	1.59	1.58
46-55 years	1.29	1.51	1.69	1.59	1.79	1.88	2.05	2.41
56-65 years	1.27	1.73	2.52	1.99	1.86	1.82	2.22	3.11
66 or more years	1.96	2.20	1.57	2.56	2.04	2.91	4.31	3.73

Table 31. **Mean Fee (in dollars) for a Follow-Up Hospital Visit, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	47.04	39.11	49.18	44.45	48.98	54.47
Census Division						
New England	45.82	·	44.98	43.69	·	·
Middle Atlantic	57.19	42.45	55.83	55.60	53.99	90.89
East North Central	42.59	36.62	44.19	41.57	41.23	50.48
West North Central	38.85	33.86	41.41	36.64	·	·
South Atlantic	49.50	41.69	48.20	46.62	59.13	51.86
East South Central	36.47	31.86	40.20	34.46	·	·
West South Central	39.54	37.72	43.63	35.42	40.76	·
Mountain	44.62	40.10	·	·	·	·
Pacific	51.89	44.88	56.84	47.52	52.89	·
Type of Practice						
Solo	47.82	39.08	51.75	44.73	50.33	56.21
Non-solo	46.41	39.15	47.48	44.21	48.23	53.24
Location						
Nonmetropolitan	36.45	34.47	42.28	33.17	·	·
Metropolitan—						
Less than 1,000,000	42.93	38.42	43.68	39.77	48.38	49.54
1,000,000 and over	53.54	43.94	54.49	52.81	50.24	63.94
Employment Status						
Self-employed	46.75	39.59	49.40	43.51	47.80	55.86
Non-self-employed[c]	48.40	36.71	48.20	52.83	53.08	48.47
Employee	48.91	37.49	49.16	52.93	49.13	·
Independent contractor	46.34	·	44.52	·	·	·
Physician Age						
Less than 36 years	46.74	39.67	47.39	50.76	51.80	46.55
Less than 40 years	47.81	39.81	49.11	47.84	52.15	46.58
36-45 years	47.42	39.77	49.15	45.68	48.05	53.30
46-55 years	46.98	39.64	49.18	42.20	45.73	60.72
56-65 years	46.87	37.82	50.66	44.24	55.50	52.78
66 or more years	45.43	36.73	50.75	·	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 31 (continued). **Standard Error of the Mean Fee (in dollars) for a Follow-Up Hospital Visit, 1991**[a]

		Specialty				
	All Physicians[b]	General/Family Practice	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology
All Physicians	0.52	0.73	0.92	0.88	1.49	2.91
Census Division						
New England	1.76	·	2.30	3.55	·	·
Middle Atlantic	1.76	2.91	2.70	2.61	3.85	14.43
East North Central	0.94	1.25	1.48	2.12	2.53	6.10
West North Central	1.23	2.00	2.76	2.29	·	·
South Atlantic	1.43	2.32	2.29	2.36	5.04	4.12
East South Central	1.14	2.46	2.46	1.76	·	·
West South Central	1.02	1.70	2.14	2.17	2.43	·
Mountain	1.90	2.27	·	·	·	·
Pacific	1.15	1.72	2.19	1.77	2.86	·
Type of Practice						
Solo	0.81	1.07	1.80	1.43	2.23	4.46
Non-solo	0.67	0.98	0.95	1.10	1.95	3.85
Location						
Nonmetropolitan	1.40	1.42	6.36	1.52	·	·
Metropolitan—						
Less than 1,000,000	0.70	0.92	0.90	0.94	2.64	4.54
1,000,000 and over	0.80	1.50	1.39	1.62	1.90	4.33
Employment Status						
Self-employed	0.55	0.80	1.05	0.92	1.50	3.36
Non-self-employed[c]	1.41	1.68	1.82	2.85	4.04	5.08
Employee	1.53	2.13	2.19	3.01	2.92	·
Independent contractor	3.56	·	2.61	·	·	·
Physician Age						
Less than 36 years	1.34	1.59	2.00	3.36	5.72	5.12
Less than 40 years	1.00	1.13	1.71	2.01	3.45	3.13
36-45 years	0.84	1.10	1.48	1.65	2.08	4.52
46-55 years	1.03	2.02	1.64	1.22	2.49	6.62
56-65 years	1.19	1.93	2.11	2.26	4.07	4.35
66 or more years	2.62	2.21	7.46	·	·	·

Table 32. **Mean Fee (in dollars) for a Follow-Up Hospital Visit, 1984-1991**[a]

	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	30.08	31.59	33.13	35.73	37.57	39.68	43.23	47.04
Specialty								
General/Family Practice	24.80	26.80	27.04	31.29	31.42	34.09	35.81	39.11
Internal Medicine	33.61	34.06	35.19	37.33	38.67	40.83	45.85	49.18
Surgery	29.26	30.69	33.42	35.97	38.20	39.31	41.85	44.45
Pediatrics	29.55	30.69	33.32	35.70	38.36	40	45.20	48.98
Obstetrics/Gynecology	30.81	33.56	34.82	37.92	40.07	41.64	49.43	54.47
Census Division								
New England	31.02	30.01	30.72	35.83	39.75	42.83	44.13	45.82
Middle Atlantic	36.78	37.96	38.20	41.96	43.43	45.85	48.60	57.19
East North Central	27.35	28.87	30.80	30.84	32.39	34.25	38.45	42.59
West North Central	23.57	24.03	26.54	29.17	30.52	30.67	36.43	38.83
South Atlantic	29.59	30.65	34.26	36.82	40.13	41.49	44.39	49.50
East South Central	22.53	24.60	26.35	29.37	28.58	30.66	32.53	36.47
West South Central	28.45	30.85	31.21	34.21	35.33	37.89	42.44	39.54
Mountain	27.19	29.70	30.30	31.80	32.58	36.16	45.48	44.62
Pacific	34.68	36.52	38.38	42.23	42.76	46.22	48.43	51.89
Type of Practice								
Solo	30.67	32.31	33.73	35.71	38.27	40.04	43.13	47.82
Non-solo	29.46	30.84	32.55	35.75	36.98	39.37	43.32	46.41
Location								
Nonmetropolitan	23.19	24.57	25.18	28.08	28.44	30.64	34.19	36.45
Metropolitan—								
Less than 1,000,000	27.28	27.88	29.68	32.94	34.91	36.29	39.36	42.93
1,000,000 and over	34.64	36.63	38.65	40.67	42.34	45.42	49.38	53.54
Physician Age								
Less than 36 years	29.28	30.74	33.46	34.94	37.77	38.18	44.64	46.74
Less than 40 years	30.38	32.29	33.61	35.33	38.07	40.16	43.80	47.81
36-45 years	30.41	33.21	33.55	35.80	37.92	40.58	44.39	47.42
46-55 years	30.27	30.68	33.23	36.49	38.44	40.98	41.88	46.98
56-65 years	30.43	30.56	33.57	35.86	36.54	37.68	42.01	46.87
66 or more years	28.00	30.70	29.03	33.13	35.20	36.72	43.44	45.43

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume.
See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 32 (continued). **Standard Error of the Mean Fee (in dollars) for a Follow-Up Hospital Visit, 1984-1991**[a]

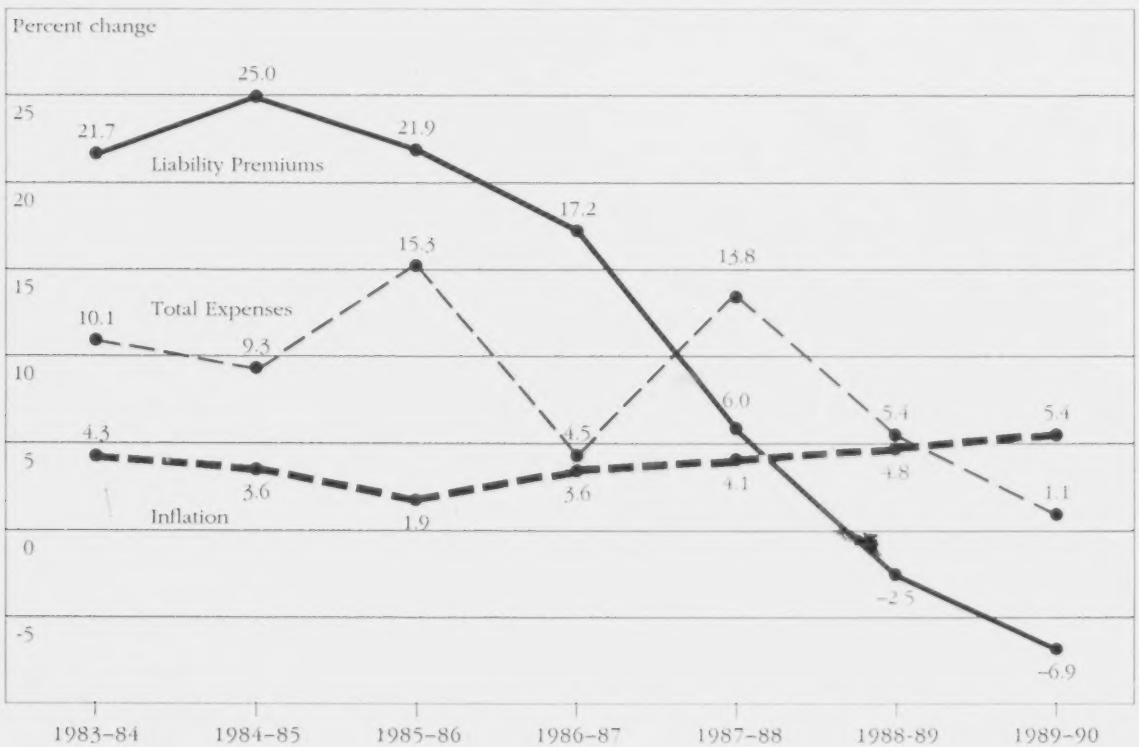
	1984	1985	1986	1987	1988	1989	1990	1991
All Physicians	0.35	0.36	0.36	0.39	0.38	0.39	0.46	0.52
Specialty								
General/Family Practice	0.48	0.49	0.50	0.68	0.52	0.63	0.67	0.73
Internal Medicine	0.80	0.73	0.57	0.67	0.59	0.67	0.83	0.92
Surgery	0.62	0.67	0.80	0.82	0.79	0.82	0.91	0.88
Pediatrics	1.00	1.08	1.07	1.13	1.40	1.25	1.71	1.49
Obstetrics/Gynecology	1.17	1.41	1.40	1.48	1.33	1.48	2.16	2.91
Census Division								
New England	1.51	1.24	0.96	1.20	1.40	1.51	1.75	1.76
Middle Atlantic	1.17	1.02	1.12	1.13	1.08	1.12	1.27	1.76
East North Central	0.82	1.02	0.93	0.69	0.67	0.78	0.84	0.94
West North Central	0.87	0.91	1.06	1.22	1.13	1.05	1.55	1.23
South Atlantic	0.75	0.75	0.96	1.06	0.95	0.99	1.19	1.43
East South Central	0.76	1.12	1.19	1.22	0.97	0.83	1.06	1.14
West South Central	0.79	0.84	0.70	0.88	1.12	1.05	1.45	1.02
Mountain	1.11	1.60	1.12	1.25	1.29	1.58	2.60	1.90
Pacific	0.95	0.92	0.76	1.14	0.95	1.08	1.18	1.15
Type of Practice								
Solo	0.50	0.51	0.50	0.56	0.57	0.59	0.67	0.81
Non-solo	0.48	0.51	0.51	0.54	0.50	0.52	0.63	0.67
Location								
Nonmetropolitan	0.56	0.68	0.68	0.94	0.67	0.74	1.22	1.40
Metropolitan—								
Less than 1,000,000	0.47	0.42	0.46	0.53	0.54	0.48	0.60	0.70
1,000,000 and over	0.58	0.62	0.58	0.61	0.59	0.67	0.75	0.80
Physician Age								
Less than 36 years	0.91	0.82	1.05	1.05	1.07	0.96	1.37	1.34
Less than 40 years	0.62	0.67	0.61	0.64	0.71	0.73	0.86	1.00
36-45 years	0.61	0.71	0.59	0.62	0.62	0.63	0.78	0.84
46-55 years	0.66	0.64	0.66	0.82	0.76	0.88	0.81	1.03
56-65 years	0.78	0.80	0.96	0.97	0.86	0.77	1.14	1.19
66 or more years	1.33	1.10	1.03	1.11	1.35	1.48	1.94	2.62

Professional Expenses of Physicians

Professional expense information reported from the Socioeconomic Monitoring System refers to tax-deductible professional expenses from medical practice, not including contributions made for physicians into deferred compensation plans. Non-solo practitioners are asked to report only their share of their practices' total expenses. The major components of total expenses are defined as follows: (1) office expenses, including rent or mortgage for office space, telephones, and utilities; (2) total nonphysician payroll expenses, including fringe benefits; (3) medical materials and supplies, such as drugs, x-ray films, and outside expenses for laboratory work and other services; (4) depreciation, lease, and rent for medical equipment; and (5) professional medical liability insurance premiums. Other expenses are not separately itemized in the surveys.

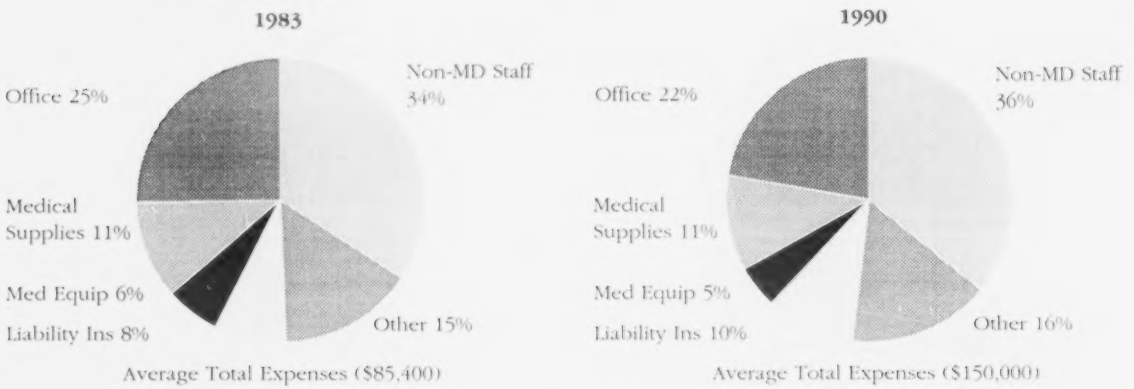
Figure 13 shows that total professional expenses increased 1.1% between 1989 and 1990. Professional liability insurance premiums decreased 6.9%. However, premiums as a percent of total professional expenses increased from 8% in 1983 to 10% in 1990 (see Figure 14). Geographic patterns in average total professional expenses are indicated in Figure 15.

Figure 13. **Percent Change in Average Total Professional Expenses and Professional Liability Insurance Premiums of Self-Employed Physicians, 1983–1990**



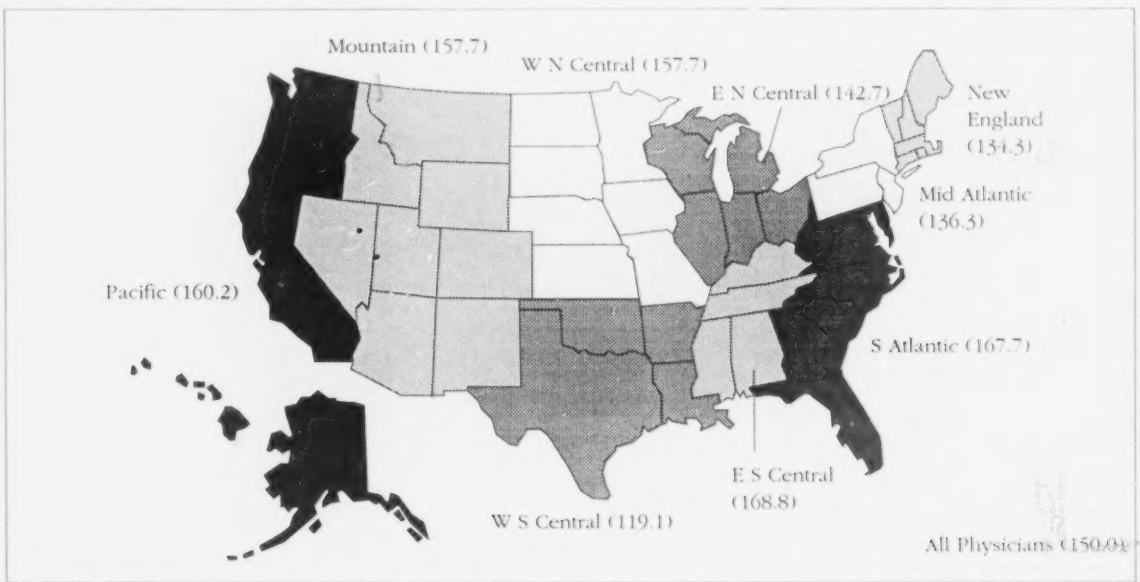
Source: AMA Socioeconomic Monitoring System 1984–1991 core surveys.

Figure 14. **Distribution of Average Professional Expenses of Self-Employed Physicians, 1983 and 1990**



Source: AMA Socioeconomic Monitoring System 1984 and 1991 core surveys.

Figure 15. **Average Professional Expenses (in thousands of dollars) of Self-Employed Physicians, by Census Division, 1990**



Source: AMA Socioeconomic Monitoring System 1991 core survey.

Table 33. **Mean Professional Expenses (in thousands of dollars) of Self-Employed Physicians, 1990[a]**

		Specialty								
	All Physicians[b]	GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	150.0	134.5	139.2	201.0	138.0	212.6	155.5	53.2	88.8	143.3
Census Division										
New England	134.3	·	135.7	178.2	·	·	·	·	·	·
Middle Atlantic	136.3	109.7	109.4	202.7	·	211.1	·	34.9	·	·
East North Central	142.7	126.1	124.6	187.5	·	·	·	·	·	·
West North Central	157.7	168.7	·	179.7	·	·	·	·	·	·
South Atlantic	167.7	140.4	162.0	232.9	138.1	304.5	·	65.7	·	·
East South Central	168.8	133.2	·	216.5	·	·	·	·	·	·
West South Central	119.1	112.0	98.3	158.1	·	·	·	·	·	·
Mountain	157.7	·	·	237.9	·	·	·	·	·	·
Pacific	160.2	139.7	163.8	206.8	122.2	·	·	52.1	·	·
Type of Practice										
Solo	131.4	118.5	123.1	176.3	122.2	203.9	·	42.9	57.9	·
Non-solo	172.3	173.6	155.1	230.6	151.6	223.1	139.4	102.9	100.8	160.7
Location										
Nonmetropolitan	140.8	138.9	127.8	146.0	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	157.7	142.1	147.2	211.5	135.3	243.3	142.6	51.7	99.8	·
1,000,000 and over	144.4	120.9	134.7	199.6	139.3	187.8	173.9	53.8	70.0	·
Physician Age										
Less than 36 years	116.4	140.2	120.9	165.8	·	·	·	·	57.9	·
Less than 40 years	139.0	139.5	132.8	202.4	114.9	196.5	·	81.9	90.5	·
36-45 years	155.8	142.1	138.5	213.8	129.1	231.2	146.3	48.8	98.8	·
46-55 years	164.2	136.1	143.1	216.6	157.9	228.1	152.5	48.5	86.9	·
56-65 years	146.9	125.5	162.9	176.8	140.0	219.5	·	50.3	·	·
66 or more years	107.3	120.2	108.7	122.4	·	·	·	·	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

· Indicates fewer than 20 observations.

Table 33 (continued). **Standard Error of the Mean Professional Expenses (in thousands of dollars) of Self-Employed Physicians, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	3.19	5.91	5.55	7.47	6.27	14.18	27.40	5.34	12.03	30.67
Census Division										
New England	9.74	·	17.69	21.70	·	·	·	·	·	·
Middle Atlantic	8.93	10.02	7.79	17.90	·	27.27	·	4.26	·	·
East North Central	7.61	15.09	12.58	17.85	·	·	·	·	·	·
West North Central	11.57	19.32	·	23.54	·	·	·	·	·	·
South Atlantic	8.5	14.43	16.14	25.48	12.71	41.65	·	12.62	·	·
East South Central	12.43	19.22	·	26.07	·	·	·	·	·	·
West South Central	6.50	11.14	9.21	12.45	·	·	·	·	·	·
Mountain	11.43	·	·	32.30	·	·	·	·	·	·
Pacific	8.40	21.23	14.90	18.90	9.97	·	·	22.01	·	·
Type of Practice										
Solo	3.82	5.13	6.48	9.49	6.96	17.04	·	3.00	5.65	·
Non-solo	5.18	14.31	8.82	11.45	9.76	23.80	21.34	25.99	16.69	35.18
Location										
Nonmetropolitan	7.26	8.72	29.23	10.10	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	5.45	10.80	9.21	12.36	9.77	26.32	39.49	5.25	21.26	·
1,000,000 and over	4.24	9.60	6.77	9.43	8.44	14.64	44.97	8.40	8.34	·
Physician Age										
Less than 36 years	7.18	22.02	13.01	17.53	·	·	·	·	8.8	·
Less than 40 years	6.19	12.29	8.23	20.20	10.63	30.92	·	27.23	24.98	·
36-45 years	5.66	7.05	7.97	14.70	10.13	27.49	60.48	5.86	25.58	·
46-55 years	5.97	13.51	14.20	11.16	13.58	24.28	24.91	6.68	17.95	·
56-65 years	7.34	9.52	14.90	16.58	13.91	29.94	·	6.86	·	·
66 or more years	10.47	31.70	11.91	24.12	·	·	·	·	·	·

Table 34. **Mean Professional Expenses (in thousands of dollars) of Self-Employed Physicians, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	85.4	94.0	102.7	118.4	123.7	140.8	148.4	150.0
Specialty								
General/Family Practice	79.4	89.2	96.5	119.9	121.2	122.3	128.5	134.5
Internal Medicine	88.5	89.7	90.0	110.5	117.8	136.3	139.1	139.2
Surgery	112.3	128.9	135.7	148.6	164.7	188.2	203.2	201.0
Pediatrics	64.1	77.8	87.3	93.2	100.2	115.3	132.5	138.0
Obstetrics/Gynecology	108.5	121.6	131.9	149.5	173.2	189.6	197.4	212.6
Radiology	80.7	98.3	120.6	153.8	119.8	162.2	179.9	155.5
Psychiatry	40.9	39.9	48.0	46.7	49.3	56.7	51.8	53.2
Anesthesiology	61.6	54.8	81.2	96.7	74.9	95.7	90.3	88.8
Pathology	65.1	56.5	60.2	67.8	59.2	78.2	89.4	143.3
Census Division								
New England	72.1	64.4	85.8	94.6	105.6	112.3	132.1	134.3
Middle Atlantic	71.6	83.6	82.6	105.4	110.1	127.9	147.3	136.3
East North Central	84.1	85.2	93.7	106.3	117.7	129.9	134.9	142.7
West North Central	86.0	100.2	102.7	132.6	135.7	141.7	159.9	157.7
South Atlantic	91.1	101.2	109.0	130.8	129.2	161.9	156.6	167.7
East South Central	88.8	102.4	106.6	133.0	127.3	167.3	178.1	168.8
West South Central	105.4	118.8	124.7	138.9	137.4	139.0	141.5	119.1
Mountain	71.5	85.3	112.2	104.6	117.2	125.0	137.4	157.7
Pacific	89.1	98.2	109.5	117.6	130.9	149.8	149.3	160.2
Type of Practice								
Solo	77.2	85.4	90.5	100.7	110.4	120.1	124.2	131.4
Non-solo	98.8	108.0	120.8	144.4	142.3	167.3	178.0	172.3
Location								
Nonmetropolitan	85.5	85.0	91.4	119.7	116.0	128.8	142.3	140.8
Metropolitan—								
Less than 1,000,000	91.5	98.0	106.2	125.3	130.7	147.3	153.0	157.7
1,000,000 and over	79.4	92.5	102.3	112.9	118.5	136.9	145.4	144.4
Physician Age								
Less than 36 years	67.2	90.4	80.4	90.9	100.0	111.0	127.8	116.4
Less than 40 years	80.4	92.6	91.7	104.9	116.6	134.6	138.8	139.0
36-45 years	89.5	96.8	101.7	123.7	127.7	149.9	150.9	155.8
46-55 years	99.2	105.0	114.1	127.9	129.5	158.3	157.9	164.2
56-65 years	80.4	86.0	107.0	119.8	130.0	132.2	155.0	146.9
66 or more years	61.5	69.1	89.4	93.4	95.1	96.7	106.2	107.3

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 34 (continued). **Standard Error of the Mean Professional Expenses (in thousands of dollars) of Self-Employed Physicians, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	1.68	2.14	2.48	2.66	2.58	2.95	3.29	3.19
Specialty								
General/Family Practice	3.24	4.04	4.83	7.01	6.56	4.92	4.53	5.91
Internal Medicine	4.88	5.19	4.35	4.96	4.97	7.00	6.32	5.55
Surgery	3.72	6.17	5.80	5.16	5.88	6.23	8.57	7.47
Pediatrics	3.00	3.91	5.43	6.29	5.09	6.88	7.24	6.27
Obstetrics/Gynecology	4.94	6.08	6.45	8.08	8.02	9.87	10.92	14.18
Radiology	8.00	11.24	16.06	15.46	15.35	20.28	22.29	27.40
Psychiatry	4.13	2.46	7.52	3.94	4.66	5.75	4.28	5.34
Anesthesiology	4.98	4.16	11.08	13.65	7.35	13.46	12.57	12.03
Pathology	12.53	10.56	14.39	8.63	9.45	12.27	13.20	30.67
Census Division								
New England	5.53	5.56	13.62	9.30	11.75	9.33	10.96	9.74
Middle Atlantic	3.88	6.01	4.86	5.75	5.66	7.30	9.10	8.93
East North Central	4.39	3.67	5.24	6.13	5.84	6.86	6.34	7.61
West North Central	6.09	7.75	12.14	11.20	14.55	9.26	10.67	11.57
South Atlantic	4.19	5.86	6.71	6.50	5.79	8.73	7.86	8.50
East South Central	5.06	7.11	7.78	9.69	7.37	11.78	22.83	12.43
West South Central	6.75	6.73	9.12	9.76	7.72	6.74	8.96	6.50
Mountain	5.14	7.68	9.62	8.44	9.34	8.66	8.80	11.43
Pacific	4.14	5.61	5.36	6.53	7.64	8.55	7.50	8.40
Type of Practice								
Solo	1.95	2.35	2.55	2.57	2.82	3.32	3.04	3.82
Non-solo	3.00	4.01	4.71	4.99	4.58	4.95	6.00	5.18
Location								
Nonmetropolitan	4.83	3.74	4.69	6.21	5.56	6.75	5.98	7.26
Metropolitan—								
Less than 1,000,000	2.53	3.48	3.86	4.01	4.29	4.51	5.59	5.45
1,000,000 and over	2.54	3.20	3.88	3.99	3.61	4.54	4.63	4.24
Physician Age								
Less than 36 years	3.82	7.87	4.85	4.74	6.45	6.72	8.70	7.18
Less than 40 years	3.12	3.99	3.83	4.25	5.19	5.06	5.24	6.19
36-45 years	3.22	3.24	4.02	4.62	5.18	5.19	4.95	5.66
46-55 years	3.51	5.32	5.20	5.72	4.55	6.89	6.51	5.97
56-65 years	3.34	3.63	5.87	5.44	5.43	5.31	9.41	7.34
66 or more years	4.19	4.11	10.00	8.04	7.11	6.54	6.49	10.47

Table 35. **Median Professional Expenses (in thousands of dollars) of Self-Employed Physicians, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	119	117	117	159	123	170	88	36	53	83
Census Division										
New England	116	·	129	132	·	·	·	·	·	·
Middle Atlantic	109	89	112	156	·	190	·	27	·	·
East North Central	110	100	102	151	·	·	·	·	·	·
West North Central	128	151	·	160	·	·	·	·	·	·
South Atlantic	128	120	133	168	123	214	·	45	·	·
East South Central	135	124	·	199	·	·	·	·	·	·
West South Central	107	107	97	153	·	·	·	·	·	·
Mountain	147	·	·	211	·	·	·	·	·	·
Pacific	126	110	135	173	116	·	·	31	·	·
Type of Practice										
Solo	109	110	107	143	109	155	·	31	48	·
Non-solo	136	150	128	195	142	191	95	57	55	83
Location										
Nonmetropolitan	119	121	93	158	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	120	120	124	154	115	193	65	46	55	·
1,000,000 and over	117	110	119	173	136	161	95	33	47	·
Physician Age										
Less than 36 years	91	93	100	160	·	·	·	·	57	·
Less than 40 years	115	116	115	162	108	160	·	36	43	·
36-45 years	127	137	120	168	115	190	65	36	47	·
46-55 years	130	110	111	180	148	170	97	40	57	·
56-65 years	115	109	122	143	119	193	·	46	·	·
66 or more years	89	99	96	93	·	·	·	·	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

· Indicates fewer than 20 observations.

Table 36. **Median Professional Expenses (in thousands of dollars) of Self-Employed Physicians, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	67	75	78	89	99	109	119	119
Specialty								
General/Family Practice	68	75	81	92	96	98	116	117
Internal Medicine	67	73	74	91	100	104	115	117
Surgery	97	104	105	116	133	151	167	159
Pediatrics	61	69	73	76	89	100	115	123
Obstetrics/Gynecology	99	106	116	124	149	164	167	170
Radiology	50	55	55	75	66	78	104	88
Psychiatry	29	30	29	33	31	40	40	36
Anesthesiology	40	41	47	53	49	56	56	53
Pathology	17	21	15	36	40	65	44	83
Census Division								
New England	55	50	57	66	81	94	98	116
Middle Atlantic	53	68	61	81	80	92	105	109
East North Central	64	72	71	75	96	95	106	110
West North Central	68	80	82	102	103	125	134	128
South Atlantic	71	77	79	100	103	123	130	128
East South Central	82	88	85	104	116	128	138	135
West South Central	78	94	91	97	108	125	118	107
Mountain	62	66	84	82	97	94	132	147
Pacific	71	74	90	92	102	115	125	126
Type of Practice								
Solo	60	69	71	80	90	91	101	109
Non-solo	80	84	90	106	113	135	144	136
Location								
Nonmetropolitan	70	77	80	95	96	110	127	119
Metropolitan—								
Less than 1,000,000	72	77	80	93	102	113	121	120
1,000,000 and over	60	69	73	82	96	101	115	117
Physician Age								
Less than 36 years	58	70	65	79	82	93	105	91
Less than 40 years	63	75	71	84	91	113	117	115
36-45 years	71	78	79	93	100	121	125	127
46-55 years	83	84	91	96	107	120	126	130
56-65 years	60	71	79	89	101	103	120	115
66 or more years	46	55	57	67	69	71	85	89

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 37. **Mean Nonphysician Personnel Payroll (in thousands of dollars) per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	54.4	50.8	51.5	74.1	56.0	66.6	43.0	14.3	38.9	54.7
Census Division										
New England	46.1	·	52.9	62.5	·	·	·	·	·	·
Middle Atlantic	47.5	50.8	38.4	80.7	·	·	·	3.8	·	·
East North Central	54.4	50.9	49.5	70.7	·	·	·	·	·	·
West North Central	57.2	64.6	·	71.3	·	·	·	·	·	·
South Atlantic	62.6	55.0	64.0	86.7	60.1	84.2	·	26.2	·	·
East South Central	59.8	46.7	·	69.9	·	·	·	·	·	·
West South Central	44.1	38.8	37.8	58.6	·	·	·	·	·	·
Mountain	57.4	·	·	·	·	·	·	·	·	·
Pacific	56.2	44.8	57.3	74.9	·	·	·	3.4	·	·
Type of Practice										
Solo	45.2	44.0	43.3	62.0	45.2	59.1	·	10.4	15.4	·
Non-solo	66.7	67.7	61.6	90.3	65.5	76.4	40.9	37.6	51.2	60.9
Location										
Nonmetropolitan	55.9	53.1	57.9	60.0	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	56.7	53.9	56.7	76.1	55.2	70.1	37.3	18.9	49.0	·
1,000,000 and over	51.8	44.8	46.9	74.3	56.0	64.5	54.3	11.4	21.2	·
Physician Age										
Less than 36 years	44.0	49.2	45.9	78.6	·	·	·	·	16.5	·
Less than 40 years	51.4	54.9	46.4	77.6	51.4	68.1	·	23.1	46.2	·
36-45 years	54.9	54.2	49.4	74.7	49.2	73.5	33.5	12.1	57.3	·
46-55 years	60.5	55.0	52.1	83.2	63.8	64.1	39.7	15.0	32.6	·
56-65 years	55.4	50.9	63.2	62.5	60.5	75.3	·	11.3	·	·
66 or more years	34.8	32.6	48.9	40.0	·	·	·	·	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

· Indicates fewer than 20 observations.

Table 37 (continued). **Standard Error of the Mean Nonphysician Personnel Payroll (in thousands of dollars) per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	1.43	2.10	2.57	3.52	3.97	5.03	8.94	2.32	10.29	13.10
Census Division										
New England	4.06	·	6.30	9.38	·	·	·	·	·	·
Middle Atlantic	3.80	6.32	3.42	10.64	·	·	·	1.41	·	·
East North Central	4.62	5.75	7.63	9.80	·	·	·	·	·	·
West North Central	4.60	7.17	·	9.77	·	·	·	·	·	·
South Atlantic	3.81	5.20	7.81	12.26	11.06	13.57	·	8.30	·	·
East South Central	4.74	7.38	·	8.82	·	·	·	·	·	·
West South Central	2.41	3.57	5.31	5.28	·	·	·	·	·	·
Mountain	5.19	·	·	·	·	·	·	·	·	·
Pacific	3.28	5.00	6.21	7.58	·	·	·	1.06	·	·
Type of Practice										
Solo	1.48	2.19	2.71	4.31	3.25	5.59	·	1.47	4.22	·
Non-solo	2.61	4.29	4.56	5.60	6.76	8.91	9.92	13.01	15.54	14.67
Location										
Nonmetropolitan	3.73	3.88	15.79	6.55	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	2.38	3.11	4.52	5.63	7.00	9.01	8.61	3.06	18.28	·
1,000,000 and over	1.95	4.02	2.76	4.86	4.73	6.60	21.71	3.42	6.38	·
Physician Age										
Less than 36 years	4.01	6.85	7.39	16.01	·	·	·	·	5.50	·
Less than 40 years	3.22	4.76	3.93	9.46	10.81	13.43	·	11.13	20.81	·
36-45 years	2.42	3.27	3.56	6.03	5.78	9.84	11.24	3.05	24.24	·
46-55 years	2.76	5.60	6.65	5.42	5.83	7.83	10.40	4.13	16.12	·
56-65 years	3.61	4.54	6.49	9.17	7.61	10.61	·	2.63	·	·
66 or more years	2.62	4.15	5.85	8.35	·	·	·	·	·	·

Table 38. **Mean Nonphysician Personnel Payroll (in thousands of dollars) per Self-Employed Physician, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	29.0	31.2	35.6	38.8	42.5	48.4	52.7	54.4
Specialty								
General/Family Practice	29.9	31.2	37.3	42.5	42.6	44.6	50.9	50.8
Internal Medicine	31.2	32.3	30.8	35.3	43.7	51.5	52.2	51.5
Surgery	37.9	42.0	43.0	48.1	58.3	61.3	71.8	74.1
Pediatrics	25.3	29.5	33.1	35.3	33.7	39.9	45.8	56.0
Obstetrics/Gynecology	33.3	36.8	42.8	45.7	48.1	64.4	61.0	66.6
Radiology	23.8	29.3	30.6	43.4	40.2	49.4	54.5	43.0
Psychiatry	10.0	9.8	16.0	14.7	15.5	18.7	15.5	14.3
Anesthesiology	23.0	20.8	39.9	29.2	23.4	29.6	32.8	38.9
Pathology	19.5	12.7	22.1	21.7	20.9	39.9	31.4	54.7
Census Division								
New England	24.3	21.3	25.3	28.7	36.6	35.0	48.1	46.1
Middle Atlantic	23.3	26.6	26.4	34.2	35.5	40.8	49.7	47.5
East North Central	28.2	28.6	31.1	33.3	40.0	46.2	47.6	54.4
West North Central	30.2	37.6	37.7	49.3	51.2	48.8	65.1	57.2
South Atlantic	31.8	34.8	41.4	40.5	46.6	57.9	58.0	62.6
East South Central	33.6	38.6	50.3	49.6	47.1	64.3	67.0	59.8
West South Central	38.7	36.4	46.0	50.2	44.0	47.5	49.6	44.1
Mountain	23.7	25.2	33.3	28.3	37.1	38.6	46.4	57.4
Pacific	27.5	32.3	34.5	39.1	45.9	51.2	50.2	56.2
Type of Practice								
Solo	24.2	25.9	29.2	31.8	35.9	40.2	40.9	45.2
Non-solo	36.7	40.1	45.6	50.0	52.9	60.3	67.9	66.7
Location								
Nonmetropolitan	31.3	29.7	33.7	43.0	43.2	52.0	54.4	55.9
Metropolitan—								
Less than 1,000,000	32.6	35.1	37.8	41.6	46.5	52.3	56.0	56.7
1,000,000 and over	25.0	29.8	33.8	34.8	38.5	43.6	49.2	51.8
Physician Age								
Less than 36 years	23.7	29.8	24.5	30.5	33.3	40.0	44.0	44.0
Less than 40 years	26.6	30.2	29.6	35.3	39.5	47.0	49.2	51.4
36-45 years	29.5	31.2	35.0	40.0	44.1	51.7	54.4	54.9
46-55 years	33.4	35.6	40.6	42.1	45.0	54.8	56.0	60.5
56-65 years	28.2	29.1	37.9	41.0	44.8	42.5	54.7	55.4
66 or more years	22.3	22.9	31.2	26.3	31.2	37.5	36.6	34.8

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 38 (continued). **Standard Error of the Mean Nonphysician Personnel Payroll (in thousands of dollars) per Self-Employed Physician, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	0.70	0.85	1.20	1.18	1.14	1.28	1.40	1.43
Specialty								
General/Family Practice	1.47	1.46	2.13	2.64	2.68	2.58	2.07	2.10
Internal Medicine	2.06	2.27	1.99	1.86	2.16	3.10	2.67	2.57
Surgery	1.55	2.53	2.19	2.32	2.81	2.76	3.56	3.52
Pediatrics	1.59	1.68	2.33	3.16	2.27	2.87	3.09	3.97
Obstetrics/Gynecology	1.88	2.17	3.36	6.30	2.94	5.40	4.21	5.03
Radiology	3.07	3.96	4.00	5.06	6.74	6.37	8.92	8.94
Psychiatry	1.41	1.11	5.88	2.57	2.41	3.08	3.40	2.32
Anesthesiology	3.35	3.49	8.94	6.61	3.61	5.82	9.05	10.29
Pathology	5.29	2.58	4.76	4.53	5.29	12.71	6.16	13.10
Census Division								
New England	2.69	2.37	3.46	2.93	4.42	3.30	4.86	4.06
Middle Atlantic	1.74	2.55	1.98	3.82	2.48	3.04	3.76	3.80
East North Central	1.76	1.54	2.04	2.61	2.55	3.19	2.66	4.62
West North Central	2.69	3.94	4.45	4.80	5.49	4.28	6.81	4.60
South Atlantic	1.78	2.26	3.56	2.40	2.89	3.58	3.59	3.81
East South Central	2.45	3.17	5.21	4.29	3.34	5.56	8.09	4.74
West South Central	2.67	2.26	5.97	4.46	2.93	2.98	3.90	2.41
Mountain	2.28	2.16	3.05	2.67	3.65	3.82	3.77	5.19
Pacific	1.53	2.21	2.10	2.94	3.63	3.73	3.11	3.28
Type of Practice								
Solo	0.73	0.82	0.92	1.07	1.17	1.49	1.22	1.48
Non-solo	1.35	1.76	2.63	2.47	2.14	2.16	2.64	2.61
Location								
Nonmetropolitan	2.14	1.42	1.96	2.91	2.76	3.92	3.05	3.73
Metropolitan—								
Less than 1,000,000	1.11	1.36	1.74	1.92	1.93	1.89	2.28	2.38
1,000,000 and over	0.97	1.32	2.01	1.69	1.52	1.93	2.05	1.95
Physician Age								
Less than 36 years	1.78	3.04	1.47	2.46	2.46	3.25	3.72	4.01
Less than 40 years	1.21	1.68	1.77	2.01	2.20	2.36	2.21	3.22
36-45 years	1.29	1.38	1.90	2.07	2.18	2.46	2.14	2.42
46-55 years	1.40	2.11	2.83	2.98	2.27	2.66	2.98	2.76
56-65 years	1.49	1.36	3.09	2.22	2.43	2.16	3.63	3.61
66 or more years	2.24	1.59	2.90	2.15	2.67	3.81	2.59	2.62

Table 39. **Mean Office Expenses (in thousands of dollars) per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	33.7	29.8	35.6	42.7	30.8	46.2	26.4	16.5	13.0	21.1
Census Division										
New England	30.0	·	34.9	36.3	·	·	·	·	·	·
Middle Atlantic	34.7	26.1	36.5	48.7	·	·	·	16.2	·	·
East North Central	26.3	19.7	23.9	38.3	42.2	·	·	·	·	·
West North Central	34.4	45.6	·	40.6	·	·	·	·	·	·
South Atlantic	36.5	32.0	37.7	46.3	28.5	60.4	·	13.7	·	·
East South Central	35.9	22.6	·	41.0	·	·	·	·	·	·
West South Central	27.4	27.9	27.2	33.4	29.0	·	·	·	·	·
Mountain	34.1	·	·	·	·	·	·	·	·	·
Pacific	39.8	27.8	49.5	45.7	·	·	·	13.4	·	·
Type of Practice										
Solo	30.5	26.2	32.8	37.3	28.4	43.0	·	15.9	12.9	·
Non-solo	37.9	38.0	39.0	49.9	32.8	50.2	26.5	19.8	13.0	24.0
Location										
Nonmetropolitan	29.6	32.7	30.0	31.2	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	34.2	27.1	32.7	45.0	30.6	59.4	29.4	17.2	17.1	·
1,000,000 and over	34.2	30.8	38.4	42.2	31.8	38.4	26.1	16.4	8.8	·
Physician Age										
Less than 36 years	29.5	29.2	33.1	33.2	·	·	·	·	5.2	·
Less than 40 years	33.6	26.4	38.7	46.1	28.7	47.5	·	24.4	10.5	·
36-45 years	35.0	29.6	36.8	42.7	25.5	62.9	21.3	18.4	13.5	·
46-55 years	37.0	42.1	34.3	45.0	39.1	40.8	32.4	13.0	·	·
56-65 years	30.6	25.3	38.5	36.7	·	53.1	·	15.5	·	·
66 or more years	26.4	21.0	28.9	37.3	·	·	·	·	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

· Indicates fewer than 20 observations.

Table 39 (continued). **Standard Error of the Mean Office Expenses (in thousands of dollars) per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	0.95	1.92	2.23	1.87	2.73	6.25	4.19	1.34	2.40	8.58
Census Division										
New England	3.67	·	6.87	10.20	·	·	·	·	·	·
Middle Atlantic	2.73	4.83	6.87	6.03	·	·	·	3.15	·	·
East North Central	1.69	2.82	2.19	4.35	10.51	·	·	·	·	·
West North Central	3.86	9.70	·	6.74	·	·	·	·	·	·
South Atlantic	2.40	3.66	4.90	4.44	4.91	15.76	·	1.85	·	·
East South Central	4.39	3.59	·	8.14	·	·	·	·	·	·
West South Central	1.59	3.49	4.24	2.84	4.78	·	·	·	·	·
Mountain	4.31	·	·	·	·	·	·	·	·	·
Pacific	2.64	3.75	5.24	3.77	·	·	·	1.78	·	·
Type of Practice										
Solo	1.06	1.86	2.26	2.01	3.40	8.67	·	1.48	4.11	·
Non-solo	1.68	4.41	4.10	3.30	4.16	9.02	4.38	3.01	2.96	9.86
Location										
Nonmetropolitan	2.26	4.19	6.84	3.50	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	1.60	3.04	2.85	3.03	4.19	14.49	5.62	2.35	4.38	·
1,000,000 and over	1.31	2.93	3.45	2.52	3.98	4.19	7.90	1.64	1.76	·
Physician Age										
Less than 36 years	2.46	5.28	5.32	8.99	·	·	·	·	1.57	·
Less than 40 years	2.02	2.89	5.39	4.69	5.23	9.94	·	5.68	3.17	·
36-45 years	1.78	2.35	3.82	3.31	3.80	15.57	7.59	3.48	3.07	·
46-55 years	1.79	9.08	4.05	2.98	6.83	5.96	6.42	1.16	·	·
56-65 years	1.85	2.93	5.45	3.98	·	5.56	·	2.22	·	·
66 or more years	2.57	2.76	6.58	8.47	·	·	·	·	·	·

Table 40. **Mean Office Expenses (in thousands of dollars) per Self-Employed Physician, 1983-1990[a]**

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	21.2	24.4	26.4	28.5	30.0	34.0	33.3	33.7
Specialty								
General/Family Practice	20.5	23.1	25.0	29.2	30.0	32.5	30.0	29.8
Internal Medicine	24.2	22.6	25.9	28.0	28.7	35.5	32.0	35.6
Surgery	26.2	33.0	32.1	38.0	38.2	43.7	45.2	42.7
Pediatrics	20.8	23.7	23.1	20.8	31.1	29.0	30.1	30.8
Obstetrics/Gynecology	25.3	31.1	36.6	37.8	42.7	43.0	39.7	46.2
Radiology	15.4	23.7	33.7	20.5	26.2	28.4	35.2	26.4
Psychiatry	12.2	13.8	14.8	15.0	16.7	19.8	17.8	16.5
Anesthesiology	10.9	9.6	11.2	15.1	9.9	13.0	11.5	13.0
Pathology	9.7	7.5	8.2	7.4	8.0	11.9	11.9	21.1
Census Division								
New England	18.4	16.9	27.4	20.1	23.9	24.9	27.9	30.0
Middle Atlantic	20.6	22.1	20.9	28.8	27.0	31.5	33.1	34.7
East North Central	20.0	19.8	25.8	21.6	27.4	32.1	29.2	26.3
West North Central	20.6	30.9	26.3	30.8	27.6	32.6	32.9	34.4
South Atlantic	22.7	26.4	24.5	30.4	30.0	34.1	36.7	36.5
East South Central	23.0	23.9	26.1	30.5	32.8	33.6	32.2	35.9
West South Central	22.7	31.7	32.1	37.2	32.6	40.9	35.7	27.4
Mountain	17.2	20.7	27.2	23.7	28.1	31.2	28.2	34.1
Pacific	22.1	26.7	30.1	30.2	36.9	38.9	36.0	39.8
Type of Practice								
Solo	20.3	23.4	25.0	26.7	28.5	32.0	30.5	30.5
Non-solo	22.6	26.1	28.7	31.3	32.4	37.0	36.8	37.9
Location								
Nonmetropolitan	21.7	19.9	21.6	28.1	26.2	26.9	31.3	29.6
Metropolitan—								
Less than 1,000,000	21.1	25.4	26.9	26.4	29.8	34.1	32.6	34.2
1,000,000 and over	21.1	24.7	27.2	30.8	31.0	35.7	34.5	34.2
Physician Age								
Less than 36 years	18.2	24.9	24.1	26.1	28.6	26.6	27.4	29.5
Less than 40 years	20.5	25.1	26.3	25.4	29.4	33.8	32.3	33.6
36-45 years	23.1	25.7	26.3	29.1	30.4	37.9	35.3	35.0
46-55 years	22.9	25.4	29.4	30.1	30.6	36.3	35.8	37.0
56-65 years	18.8	22.2	23.7	29.3	31.6	31.9	31.6	30.6
66 or more years	16.6	19.9	26.5	20.3	23.3	23.1	24.8	26.4

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 40 (continued). **Standard Error of the Mean Office Expenses (in thousands of dollars) per Self-Employed Physician, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	0.51	0.77	0.81	0.84	0.87	0.97	0.96	0.95
Specialty								
General/Family Practice	1.13	1.44	1.83	2.17	1.87	2.12	2.32	1.92
Internal Medicine	1.51	1.38	1.62	1.78	1.62	2.54	1.83	2.23
Surgery	1.12	2.29	1.72	2.08	2.28	2.05	2.29	1.87
Pediatrics	1.50	2.07	1.93	1.59	2.68	2.88	2.35	2.73
Obstetrics/Gynecology	1.65	2.82	3.03	3.07	3.35	3.71	3.06	6.25
Radiology	2.18	4.01	6.72	3.36	3.36	5.22	6.88	4.19
Psychiatry	0.99	0.88	1.30	1.24	1.33	1.84	1.56	1.34
Anesthesiology	1.29	0.78	1.20	1.46	1.32	2.61	1.76	2.40
Pathology	2.62	1.80	2.32	1.53	2.65	3.75	4.12	8.58
Census Division								
New England	1.78	1.81	6.03	2.11	3.31	3.80	2.92	3.67
Middle Atlantic	1.33	1.89	1.59	2.27	2.02	2.18	2.11	2.73
East North Central	1.23	1.23	2.08	1.48	2.01	2.41	2.41	1.69
West North Central	1.83	4.51	3.72	3.50	5.59	3.87	2.99	3.86
South Atlantic	1.25	1.93	1.50	2.26	1.66	2.15	2.44	2.40
East South Central	2.32	2.49	2.64	3.75	3.45	3.50	3.84	4.39
West South Central	1.56	3.62	2.43	3.25	2.05	3.38	3.80	1.59
Mountain	1.70	1.98	3.69	2.15	2.59	3.70	2.46	4.31
Pacific	1.30	1.74	1.99	1.88	2.75	2.81	2.45	2.64
Type of Practice								
Solo	0.60	0.91	0.97	0.93	0.99	1.15	0.97	1.06
Non-solo	0.90	1.36	1.41	1.57	1.55	1.66	1.74	1.68
Location								
Nonmetropolitan	1.61	2.46	1.75	2.52	1.94	2.37	2.95	2.26
Metropolitan—								
Less than 1,000,000	0.75	1.22	1.35	1.02	1.19	1.36	1.30	1.60
1,000,000 and over	0.75	1.17	1.16	1.46	1.48	1.61	1.55	1.31
Physician Age								
Less than 36 years	1.38	2.62	2.21	2.73	3.81	2.54	2.24	2.46
Less than 40 years	0.99	1.60	1.52	1.33	2.03	1.94	2.13	2.02
36-45 years	1.05	1.40	1.28	1.45	1.51	1.92	1.81	1.78
46-55 years	0.95	1.68	1.67	1.88	1.47	1.93	1.89	1.79
56-65 years	0.89	1.25	1.37	1.66	1.88	1.83	1.89	1.85
66 or more years	1.41	1.74	4.34	1.49	2.19	2.18	2.34	2.57

Table 41. **Mean Expenditures (in thousands of dollars) on Medical Supplies per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	16.5	20.4	15.5	19.7	24.8	24.9	17.0	1.2	0.6	10.1
Census Division										
New England	13.5	·	·	13.0	·	·	·	·	·	·
Middle Atlantic	12.9	13.6	11.9	16.9	·	·	·	1.8	·	·
East North Central	13.9	19.8	14.2	16.0	·	·	·	·	·	·
West North Central	16.4	25.1	·	12.3	·	·	·	·	·	·
South Atlantic	17.3	20.7	17.0	18.8	22.3	47.9	·	0.7	·	·
East South Central	24.3	39.7	·	24.0	·	·	·	·	·	·
West South Central	13.9	13.9	9.0	16.1	·	·	·	·	·	·
Mountain	16.8	·	·	·	·	·	·	·	·	·
Pacific	20.9	16.3	24.1	26.2	·	·	·	0.8	·	·
Type of Practice										
Solo	15.1	18.3	12.9	17.7	24.8	21.7	·	1.3	1.1	·
Non-solo	18.4	25.5	18.7	22.4	24.8	29.0	15.0	0.4	0.4	10.0
Location										
Nonmetropolitan	18.6	23.1	14.7	12.4	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	15.9	21.6	12.2	21.7	25.0	21.5	12.7	0.9	0.6	·
1,000,000 and over	16.7	16.8	17.9	18.7	27.0	26.7	18.9	1.4	0.6	·
Physician Age										
Less than 36 years	13.7	18.7	17.7	13.7	·	·	·	·	0.9	·
Less than 40 years	15.0	19.8	15.9	16.5	24.8	22.3	·	1.3	0.7	·
36-45 years	18.0	21.7	15.2	22.9	21.1	26.1	13.4	0.9	1.0	·
46-55 years	16.2	17.0	14.1	21.0	27.2	19.7	19.2	1.1	0.4	·
56-65 years	17.0	23.2	19.2	14.5	·	37.0	·	1.0	·	·
66 or more years	11.0	15.8	10.6	·	·	·	·	·	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

· Indicates fewer than 20 observations.

Table 41 (continued). **Standard Error of the Mean Expenditures (in thousands of dollars) on Medical Supplies per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	0.70	1.61	1.28	1.81	1.95	3.63	4.22	0.25	0.17	2.91
Census Division										
New England	2.38	·	·	4.67	·	·	·	·	·	·
Middle Atlantic	1.13	2.68	1.93	2.87	·	·	·	1.02	·	·
East North Central	1.07	3.51	1.93	2.54	·	·	·	·	·	·
West North Central	2.06	3.72	·	3.28	·	·	·	·	·	·
South Atlantic	1.62	3.17	2.70	3.35	5.97	14.90	·	0.19	·	·
East South Central	3.87	11.00	·	6.24	·	·	·	·	·	·
West South Central	1.53	1.91	2.06	2.78	·	·	·	·	·	·
Mountain	2.87	·	·	·	·	·	·	·	·	·
Pacific	2.63	3.77	5.75	7.04	·	·	·	0.21	·	·
Type of Practice										
Solo	0.98	1.94	1.25	2.72	2.15	4.75	·	0.29	0.41	·
Non-solo	1.01	2.82	2.38	2.24	3.11	5.62	4.02	0.12	0.16	3.26
Location										
Nonmetropolitan	1.87	2.81	3.57	2.19	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	1.17	3.11	1.47	3.18	3.28	5.59	4.36	0.23	0.20	·
1,000,000 and over	0.96	2.01	2.04	1.92	2.62	5.63	6.61	0.41	0.29	·
Physician Age										
Less than 36 years	1.47	3.50	3.73	2.58	·	·	·	·	0.27	·
Less than 40 years	1.09	2.38	1.96	2.81	4.83	7.94	·	0.50	0.20	·
36-45 years	1.31	1.90	1.78	4.18	2.54	5.40	8.07	0.21	0.37	·
46-55 years	1.13	3.18	2.51	2.20	3.91	3.92	6.05	0.22	0.28	·
56-65 years	1.90	5.09	4.83	2.95	·	13.00	·	0.35	·	·
66 or more years	1.73	5.67	2.41	·	·	·	·	·	·	·

Table 42. **Mean Expenditures (in thousands of dollars) on Medical Supplies per Self-Employed Physician, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	9.3	10.7	11.2	13.2	13.5	14.5	17.0	16.5
Specialty								
General/Family Practice	11.6	13.7	14.8	17.6	17.2	16.2	19.9	20.4
Internal Medicine	10.9	11.0	11.5	14.9	16.8	15.1	21.2	15.5
Surgery	11.4	13.7	13.8	13.4	13.8	17.4	17.8	19.7
Pediatrics	7.2	9.6	12.6	14.8	16.6	20.7	21.2	24.8
Obstetrics/Gynecology	11.1	13.3	12.2	14.1	17.4	18.5	18.0	24.9
Radiology	8.5	13.3	12.1	16.8	14.3	15.0	20.4	17.0
Psychiatry	1.4	1.4	1.7	2.6	1.4	1.8	1.6	1.2
Anesthesiology	1.4	0.8	0.7	2.3	2.2	1.0	2.4	0.6
Pathology	9.6	11.3	12.5	7.2	5.6	7.0	15.8	10.1
Census Division								
New England	6.4	4.7	10.1	10.3	9.5	9.5	12.6	13.5
Middle Atlantic	8.4	8.1	7.3	10.0	12.2	11.5	15.1	12.9
East North Central	8.0	10.4	10.1	11.0	13.6	14.0	13.1	13.9
West North Central	10.2	9.1	14.2	17.3	17.6	13.5	17.1	16.4
South Atlantic	8.9	12.4	12.1	14.6	13.1	16.9	16.5	17.3
East South Central	11.9	14.6	12.2	17.7	13.5	18.2	26.4	24.3
West South Central	13.2	15.6	15.3	18.4	15.7	17.3	20.6	13.9
Mountain	7.8	10.3	13.9	14.3	12.3	11.8	16.4	16.8
Pacific	9.5	10.6	10.7	10.8	13.8	15.4	19.1	20.9
Type of Practice								
Solo	8.6	10.3	9.9	11.0	12.5	12.8	14.2	15.1
Non-solo	10.3	11.5	13.4	16.9	15.0	16.9	20.6	18.4
Location								
Nonmetropolitan	9.2	11.9	13.5	15.5	17.1	14.5	19.5	18.6
Metropolitan—								
Less than 1,000,000	10.2	11.9	11.3	14.7	13.5	15.5	17.7	15.9
1,000,000 and over	8.4	9.5	10.6	11.1	12.6	13.5	15.8	16.7
Physician Age								
Less than 36 years	7.0	10.0	10.3	11.9	11.8	12.2	13.8	13.7
Less than 40 years	8.1	10.0	11.0	11.9	13.0	12.6	16.2	15.0
36-45 years	8.9	11.1	11.1	12.7	14.7	15.2	17.8	18.0
46-55 years	10.8	11.4	11.5	16.8	12.8	16.2	17.7	16.2
56-65 years	9.5	9.9	12.3	12.1	13.8	13.3	18.1	17.0
66 or more years	8.6	10.2	9.9	8.9	11.2	11.1	11.8	11.0

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 42 (continued). **Standard Error of the Mean Expenditures (in thousands of dollars) on Medical Supplies per Self-Employed Physician, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	0.29	0.42	0.48	0.66	0.54	0.57	0.74	0.70
Specialty								
General/Family Practice	0.61	1.10	1.18	1.49	1.53	1.06	1.20	1.61
Internal Medicine	0.87	0.93	1.19	2.01	1.38	1.29	2.79	1.28
Surgery	0.73	1.06	1.15	1.44	1.09	1.37	1.23	1.81
Pediatrics	0.56	0.77	1.31	1.30	1.68	2.16	2.18	1.95
Obstetrics/Gynecology	0.88	1.10	1.18	1.64	1.88	1.91	1.57	3.63
Radiology	1.31	2.72	2.90	2.93	3.32	3.09	5.14	4.22
Psychiatry	0.34	0.18	0.24	1.38	0.24	0.25	0.27	0.25
Anesthesiology	0.49	0.23	0.15	0.51	0.57	0.35	0.62	0.17
Pathology	2.42	5.17	5.08	2.08	2.09	3.21	4.46	2.91
Census Division								
New England	0.80	0.69	3.06	3.34	2.01	1.51	2.10	2.38
Middle Atlantic	0.78	0.79	0.80	0.94	1.12	1.19	1.83	1.13
East North Central	0.74	0.94	1.00	1.13	1.47	1.56	1.08	1.07
West North Central	0.97	1.26	3.49	2.80	3.24	1.24	1.92	2.06
South Atlantic	0.62	1.03	1.03	1.50	1.01	1.48	1.19	1.62
East South Central	1.20	2.22	1.10	2.92	1.40	2.56	4.14	3.87
West South Central	1.18	1.62	1.60	2.82	1.56	1.88	5.44	1.53
Mountain	0.81	1.49	1.91	4.32	2.58	1.54	2.10	2.87
Pacific	0.76	1.26	1.14	1.02	1.57	1.71	2.34	2.63
Type of Practice								
Solo	0.36	0.51	0.50	0.69	0.63	0.63	0.80	0.98
Non-solo	0.49	0.73	0.93	1.29	0.96	1.02	1.30	1.01
Location								
Nonmetropolitan	0.65	1.19	1.31	1.44	1.84	1.32	1.48	1.87
Metropolitan—								
Less than 1,000,000	0.47	0.73	0.67	1.24	0.84	0.89	1.26	1.17
1,000,000 and over	0.44	0.54	0.77	0.68	0.75	0.86	1.04	0.96
Physician Age								
Less than 36 years	0.68	1.10	1.20	1.48	1.21	1.61	1.45	1.47
Less than 40 years	0.48	0.68	0.80	0.91	1.03	0.85	1.35	1.09
36-45 years	0.50	0.73	0.70	0.88	1.06	0.98	1.12	1.31
46-55 years	0.62	0.79	0.92	2.06	0.99	1.24	1.77	1.13
56-65 years	0.64	1.00	1.34	1.00	1.21	1.18	1.66	1.90
66 or more years	1.03	1.49	1.83	1.08	1.51	1.53	1.25	1.73

Table 43. **Mean Professional Liability Premiums (in thousands of dollars) per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	14.5	7.8	9.2	22.8	7.8	34.3	11.5	4.5	20.8	7.7
Census Division										
New England	19.8	·	9.6	34.1	·	·	·	·	·	·
Middle Atlantic	16.1	7.7	8.9	28.6	·	45.3	·	4.4	·	·
East North Central	15.1	8.7	9.3	22.6	8.8	30.4	·	·	26.2	·
West North Central	13.6	8.6	6.6	17.7	·	·	·	·	·	·
South Atlantic	15.4	6.7	9.3	25.1	8.5	39.3	·	6.3	22.7	·
East South Central	15.1	6.6	17.7	18.7	·	·	·	·	·	·
West South Central	11.2	7.6	5.3	17.9	6.2	23.2	·	·	·	·
Mountain	18.7	·	·	29.7	·	·	·	·	·	·
Pacific	10.9	6.8	6.5	16.8	6.8	23.8	·	4.1	·	·
Type of Practice										
Solo	13.0	7.5	7.8	21.7	7.5	30.9	·	4.3	18.8	·
Non-solo	16.3	8.4	10.6	24.3	8.1	37.9	12.3	5.6	21.6	7.9
Location										
Nonmetropolitan	12.4	8.2	7.5	18.8	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	15.1	7.3	8.9	23.2	6.5	34.0	10.0	4.2	21.9	7.9
1,000,000 and over	14.4	8.0	9.6	23.1	9.0	36.5	13.2	4.9	19.4	·
Physician Age										
Less than 36 years	10.8	6.8	6.0	18.0	7.2	·	·	·	19.9	·
Less than 40 years	13.1	7.1	7.9	23.0	6.5	33.1	·	4.5	19.7	·
36-45 years	14.8	7.8	9.9	24.5	7.9	36.6	11.5	4.7	19.3	·
46-55 years	16.1	8.4	8.1	24.0	7.7	34.4	12.2	4.7	22.3	·
56-65 years	14.9	8.4	12.5	20.8	7.9	37.4	·	4.1	·	·
66 or more years	10.2	5.9	6.5	16.2	·	·	·	·	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

· Indicates fewer than 20 observations.

Table 43 (continued). **Standard Error of the Mean Professional Liability Premiums (in thousands of dollars) per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	0.35	0.30	0.89	0.75	0.41	1.61	0.88	0.23	0.96	0.86
Census Division										
New England	2.29	·	2.46	4.42	·	·	·	·	·	·
Middle Atlantic	0.93	0.78	0.51	2.11	·	4.42	·	0.48	·	·
East North Central	0.70	0.63	0.97	1.57	1.09	5.40	·	·	1.68	·
West North Central	1.03	0.74	0.68	2.24	·	·	·	·	·	·
South Atlantic	0.76	0.95	1.06	1.91	0.86	5.51	·	0.71	2.66	·
East South Central	2.49	0.96	12.82	2.03	·	·	·	·	·	·
West South Central	0.71	0.94	0.68	1.76	0.49	5.21	·	·	·	·
Mountain	2.29	·	·	5.65	·	·	·	·	·	·
Pacific	0.48	0.52	0.43	0.99	1.05	2.50	·	0.37	·	·
Type of Practice										
Solo	0.40	0.37	0.50	0.96	0.58	2.02	·	0.23	1.39	·
Non-solo	0.58	0.53	1.76	1.10	0.37	2.47	1.02	0.68	1.21	0.97
Location										
Nonmetropolitan	0.81	0.52	1.75	1.75	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	0.57	0.51	1.88	1.05	0.50	2.24	0.87	0.25	1.51	1.59
1,000,000 and over	0.49	0.53	0.91	1.16	0.64	2.62	1.42	0.36	1.15	·
Physician Age										
Less than 36 years	0.71	0.57	0.62	2.62	0.95	·	·	·	1.64	·
Less than 40 years	0.62	0.43	0.79	1.87	0.61	5.75	·	0.54	1.28	·
36-45 years	0.58	0.46	1.22	1.55	0.66	2.82	1.46	0.43	1.25	·
46-55 years	0.60	0.75	0.58	1.17	0.84	2.27	1.61	0.50	1.88	·
56-65 years	1.10	0.82	4.59	1.61	1.08	4.52	·	0.36	·	
66 or more years	0.86	0.65	0.62	2.48	·	·	·	·	·	·

Table 44. **Mean Professional Liability Premiums (in thousands of dollars) per Self-Employed Physician, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	6.9	8.4	10.5	12.8	15.0	15.9	15.5	14.5
Specialty								
General/Family Practice	4.2	4.6	6.8	7.3	8.9	9.4	9.0	7.8
Internal Medicine	4.5	4.9	5.8	7.1	8.4	9.0	8.2	9.2
Surgery	11.0	13.3	16.6	21.3	24.5	26.5	25.8	22.8
Pediatrics	3.9	3.4	4.7	6.3	7.1	9.3	7.8	7.8
Obstetrics/Gynecology	14.0	19.0	23.5	29.3	35.3	35.3	37.0	34.3
Radiology	5.6	6.3	8.9	10.4	9.5	12.9	13.3	11.5
Psychiatry	2.0	2.1	2.5	3.4	3.8	4.4	6.3	4.5
Anesthesiology	12.7	16.1	17.9	20.5	22.9	23.6	21.7	20.8
Pathology	3.9	2.8	3.1	4.4	6.2	4.9	5.5	7.7
Census Division								
New England	6.6	7.1	9.8	10.7	17.9	18.2	17.7	19.8
Middle Atlantic	8.9	10.4	12.9	14.9	17.0	15.5	18.1	16.1
East North Central	6.9	7.6	10.7	13.4	13.9	14.8	16.1	15.1
West North Central	4.8	8.0	10.1	13.6	15.4	19.2	15.8	13.6
South Atlantic	6.1	8.6	11.3	14.4	15.5	18.4	15.6	15.4
East South Central	5.7	6.3	9.7	10.1	12.6	13.5	15.6	15.1
West South Central	5.2	5.5	7.0	8.1	11.9	13.4	11.3	11.2
Mountain	6.2	7.5	8.1	12.0	16.1	16.8	19.4	18.7
Pacific	8.6	9.9	11.1	12.8	14.4	14.4	12.7	10.9
Type of Practice								
Solo	6.5	7.9	9.5	11.9	14.0	14.3	13.7	13.0
Non-solo	7.5	9.2	11.8	14.0	16.2	17.8	17.7	16.3
Location								
Nonmetropolitan	5.1	7.1	7.6	10.9	14.2	13.6	13.5	12.4
Metropolitan—								
Less than 1,000,000	6.5	7.8	10.1	12.3	14.1	15.6	15.6	15.1
1,000,000 and over	7.8	9.2	11.6	13.8	16.0	16.6	16.0	14.4
Physician Age								
Less than 36 years	5.2	6.2	8.7	9.5	12.0	11.0	12.7	10.8
Less than 40 years	5.9	7.5	9.2	11.5	14.3	13.3	13.8	13.1
36-45 years	7.0	8.5	10.4	13.0	14.8	16.5	15.0	14.8
46-55 years	7.7	9.4	11.6	14.8	16.1	17.0	17.5	16.1
56-65 years	7.0	8.7	10.8	12.4	16.6	16.9	16.3	14.9
66 or more years	5.9	6.5	8.5	10.3	10.7	11.4	11.8	10.2

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume.
See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 44 (continued). **Standard Error of the Mean Professional Liability Premiums (in thousands of dollars) per Self-Employed Physician, 1983-1990[a]**

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	0.16	0.20	0.23	0.29	0.39	0.41	0.43	0.35
Specialty								
General/Family Practice	0.28	0.28	0.43	0.37	0.95	0.57	0.56	0.30
Internal Medicine	0.35	0.30	0.38	0.49	0.44	0.68	0.31	0.89
Surgery	0.34	0.49	0.49	0.67	0.96	0.94	1.14	0.73
Pediatrics	0.61	0.16	0.31	0.39	0.41	1.78	0.48	0.41
Obstetrics/Gynecology	0.68	0.94	1.05	1.21	1.50	1.72	1.93	1.61
Radiology	0.57	0.35	0.77	0.87	0.48	0.99	0.90	0.88
Psychiatry	0.19	0.19	0.15	0.19	0.24	0.25	2.06	0.23
Anesthesiology	0.56	0.64	0.81	0.93	1.03	1.22	1.01	0.96
Pathology	0.82	0.24	0.20	0.28	0.84	0.52	0.44	0.86
Census Division								
New England	0.83	0.73	1.14	1.31	3.30	2.42	2.71	2.29
Middle Atlantic	0.50	0.60	0.66	0.81	1.03	0.85	1.21	0.93
East North Central	0.44	0.42	0.53	0.69	0.77	0.78	0.90	0.70
West North Central	0.34	0.71	0.82	0.91	1.06	2.04	1.05	1.03
South Atlantic	0.32	0.46	0.66	0.85	0.83	1.11	1.20	0.76
East South Central	0.51	0.91	0.94	0.81	0.99	1.11	2.76	2.49
West South Central	0.33	0.39	0.43	0.61	1.54	1.10	0.77	0.71
Mountain	0.52	0.64	0.65	0.95	1.38	1.37	1.45	2.29
Pacific	0.48	0.52	0.56	0.69	0.80	1.19	0.65	0.48
Type of Practice								
Solo	0.22	0.24	0.28	0.38	0.52	0.56	0.48	0.40
Non-solo	0.25	0.33	0.39	0.45	0.60	0.59	0.74	0.58
Location								
Nonmetropolitan	0.38	0.51	0.39	0.64	1.47	0.87	0.92	0.81
Metropolitan—								
Less than 1,000,000	0.21	0.29	0.34	0.43	0.56	0.59	0.73	0.57
1,000,000 and over	0.28	0.31	0.38	0.47	0.58	0.67	0.61	0.49
Physician Age								
Less than 36 years	0.38	0.47	0.58	0.56	0.74	0.72	1.04	0.71
Less than 40 years	0.25	0.35	0.37	0.48	0.66	0.59	0.55	0.62
36-45 years	0.29	0.34	0.39	0.53	0.59	0.76	0.63	0.58
46-55 years	0.33	0.44	0.49	0.63	0.69	0.78	0.91	0.60
56-65 years	0.36	0.42	0.54	0.56	1.23	0.97	1.20	1.10
66 or more years	0.63	0.54	0.70	0.93	0.84	0.92	1.00	0.86

Table 45. **Mean Expenditures (in thousands of dollars) on Medical Equipment per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	7.7	6.5	6.8	12.1	4.8	9.3	13.2	1.4	1.0	7.8
Census Division										
New England	6.6	·	·	11.9	·	·	·	·	·	·
Middle Atlantic	6.7	4.5	5.3	10.0	·	·	·	0.1	·	·
East North Central	6.9	7.4	4.7	13.4	·	·	·	·	·	·
West North Central	7.7	7.3	·	10.8	·	·	·	·	·	·
South Atlantic	9.4	7.0	8.4	18.5	6.3	·	·	1.3	·	·
East South Central	8.5	8.3	·	10.7	·	·	·	·	·	·
West South Central	5.9	7.6	5.2	6.6	·	·	·	·	·	·
Mountain	6.6	·	·	·	·	·	·	·	·	·
Pacific	8.8	4.1	10.6	11.7	4.8	·	·	0.3	·	·
Type of Practice										
Solo	6.9	5.3	7.0	10.6	5.6	10.7	·	1.0	1.4	·
Non-solo	8.7	9.7	6.6	14.0	4.0	7.6	15.6	3.7	0.8	9.0
Location										
Nonmetropolitan	7.6	7.9	6.5	9.8	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	8.3	6.1	7.3	14.3	4.4	7.1	9.1	2.0	1.3	·
1,000,000 and over	7.1	6.1	6.5	9.7	4.9	12.3	19.0	1.0	0.7	·
Physician Age										
Less than 36 years	6.2	7.0	6.5	13.8	·	·	·	·	2.1	·
Less than 40 years	8.5	8.9	6.1	21.8	5.8	5.5	·	1.0	1.4	·
36-45 years	8.6	9.3	6.9	16.0	2.9	9.9	7.3	2.0	1.5	·
46-55 years	9.0	4.9	7.8	11.0	7.7	16.4	18.7	1.6	0.2	·
56-65 years	5.7	4.1	6.8	8.0	·	7.2	·	0.8	·	·
66 or more years	3.7	4.3	3.1	·	·	·	·	·	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

· Indicates fewer than 20 observations.

Table 45 (continued). **Standard Error of the Mean Expenditures (in thousands of dollars) on Medical Equipment per Self-Employed Physician, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	0.49	0.65	0.68	1.60	0.82	1.42	5.45	0.40	0.31	5.07
Census Division										
New England	2.18	·	·	7.34	·	·	·	·	·	·
Middle Atlantic	1.06	1.68	1.23	2.30	·	·	·	0.07	·	·
East North Central	0.88	1.94	1.02	3.36	·	·	·	·	·	·
West North Central	1.45	2.03	·	3.12	·	·	·	·	·	·
South Atlantic	1.77	1.73	1.58	7.78	1.85	·	·	0.33	·	·
East South Central	1.26	3.11	·	2.22	·	·	·	·	·	·
West South Central	0.96	1.30	1.86	1.36	·	·	·	·	·	·
Mountain	1.13	·	·	·	·	·	·	·	·	·
Pacific	1.15	0.78	2.73	2.78	5.42	·	·	0.12	·	·
Type of Practice										
Solo	0.51	0.59	1.05	1.50	1.50	2.25	·	0.28	0.70	·
Non-solo	0.89	1.58	0.86	3.02	0.80	1.56	4.16	2.10	0.32	3.56
Location										
Nonmetropolitan	0.88	1.47	2.51	1.73	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	0.89	0.95	0.89	2.82	1.20	1.45	2.94	0.59	0.53	·
1,000,000 and over	0.60	1.05	1.02	1.60	1.23	2.59	8.29	0.55	0.30	·
Physician Age										
Less than 36 years	0.94	2.29	1.13	4.43	·	·	·	·	0.88	·
Less than 40 years	1.37	1.70	0.77	7.14	2.52	1.44	·	0.40	0.54	·
36-45 years	0.95	1.24	1.13	3.82	0.56	2.00	2.81	1.13	0.52	·
46-55 years	0.94	1.16	1.65	1.72	1.93	4.91	7.03	0.70	0.13	·
56-65 years	0.85	0.68	1.41	2.25	·	2.01	·	0.45	·	·
66 or more years	1.03	1.26	0.84	·	·	·	·	·	·	·

Table 46. **Mean Expenditures (in thousands of dollars) on Medical Equipment per Self-Employed Physician, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	5.1	5.5	5.9	7.0	6.5	6.9	7.6	7.7
Specialty								
General/Family Practice	4.3	4.8	4.8	6.9	7.2	6.3	5.8	6.5
Internal Medicine	4.9	4.8	7.0	5.8	5.1	6.3	7.2	6.8
Surgery	7.3	8.3	8.4	8.5	9.2	10.6	11.6	12.1
Pediatrics	4.4	3.3	3.9	4.7	4.1	3.9	6.0	4.8
Obstetrics/Gynecology	6.6	7.9	7.1	7.2	8.5	7.3	10.6	9.3
Radiology	7.4	10.4	11.4	27.0	12.1	14.9	12.1	13.2
Psychiatry	1.5	1.8	1.8	1.6	1.9	1.3	1.6	1.4
Anesthesiology	2.9	0.9	1.2	1.9	2.1	1.4	1.3	1.0
Pathology	4.3	1.5	2.9	1.9	1.4	4.2	3.8	7.8
Census Division								
New England	5.1	2.7	4.9	3.2	5.0	5.7	5.0	6.6
Middle Atlantic	3.8	5.4	4.5	4.8	5.8	4.4	7.6	6.7
East North Central	4.9	3.9	5.4	4.9	5.0	6.2	7.3	6.9
West North Central	4.2	5.2	5.1	10.7	5.4	7.1	7.2	7.7
South Atlantic	5.9	6.0	5.6	8.9	7.5	7.5	7.9	9.4
East South Central	4.7	5.3	6.0	8.4	6.3	11.5	8.3	8.5
West South Central	7.2	9.0	6.9	8.0	6.7	7.1	8.1	5.9
Mountain	4.0	6.7	11.8	7.2	5.7	5.4	6.4	6.6
Pacific	5.1	5.4	5.6	7.9	8.5	8.5	8.3	8.8
Type of Practice								
Solo	4.8	5.0	5.6	5.5	6.0	5.7	6.9	6.9
Non-solo	5.5	6.5	6.4	9.4	7.1	8.5	8.5	8.7
Location								
Nonmetropolitan	4.7	4.5	6.3	7.1	6.5	6.3	7.2	7.6
Metropolitan—								
Less than 1,000,000	5.3	6.4	6.3	7.8	7.6	8.0	7.6	8.3
1,000,000 and over	5.0	5.0	5.4	6.1	5.4	5.9	7.7	7.1
Physician Age								
Less than 36 years	4.9	8.9	6.4	6.2	5.0	6.5	7.9	6.2
Less than 40 years	5.1	6.8	7.2	7.5	6.2	7.6	7.9	8.5
36-45 years	5.3	6.2	6.8	8.2	6.9	7.7	8.0	8.6
46-55 years	5.8	5.5	5.5	7.3	7.5	8.4	8.0	9.0
56-65 years	4.7	3.5	5.3	6.0	5.9	5.4	8.1	5.7
66 or more years	2.5	3.1	4.4	3.4	4.0	2.9	2.8	3.7

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 46 (continued). **Standard Error of the Mean Expenditures (in thousands of dollars) on Medical Equipment per Self-Employed Physician, 1983-1990**[a]

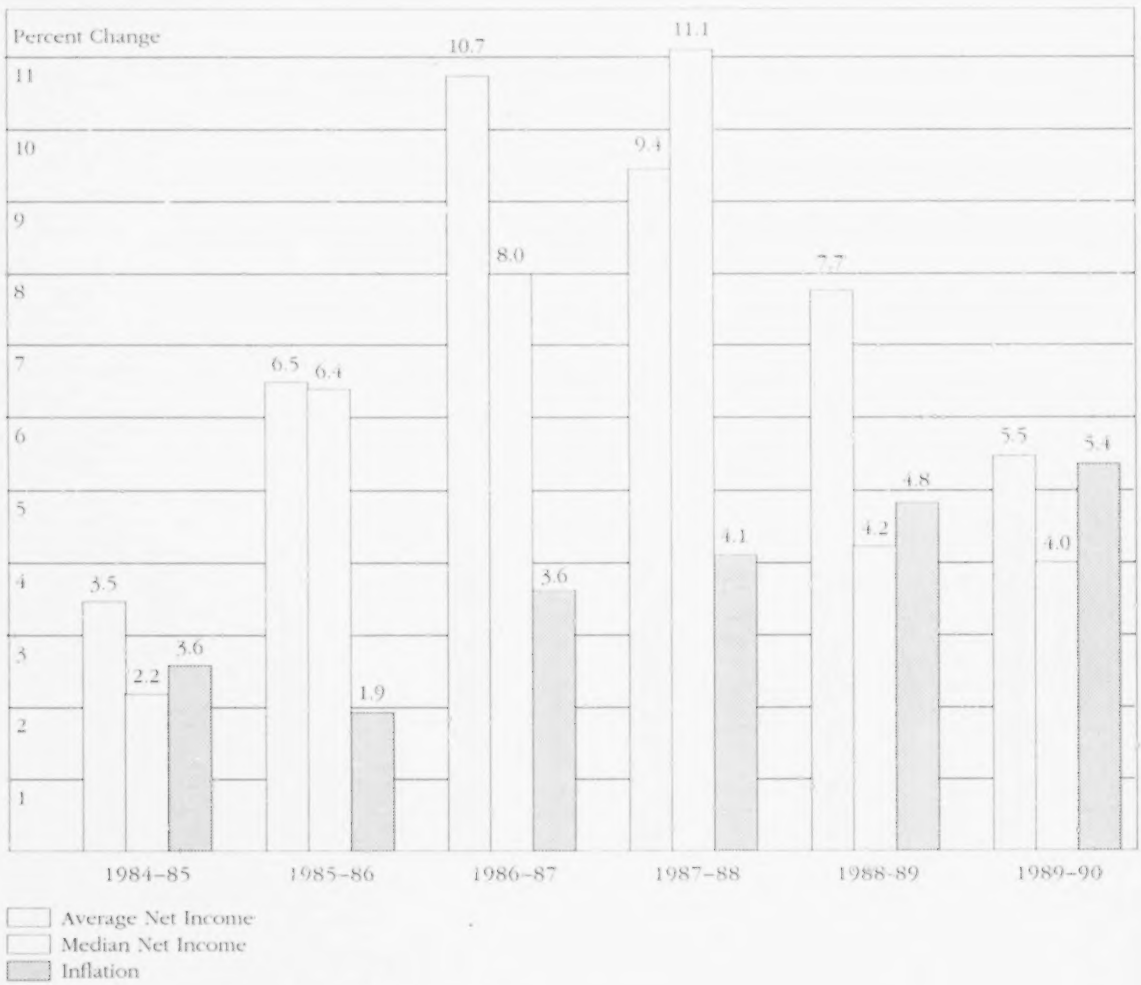
	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	0.22	0.34	0.43	0.42	0.41	0.37	0.35	0.49
Specialty								
General/Family Practice	0.47	0.51	0.38	0.80	1.69	0.66	0.45	0.65
Internal Medicine	0.47	0.58	2.30	0.59	0.47	0.65	0.64	0.68
Surgery	0.60	0.92	0.79	0.67	0.77	0.89	0.83	1.60
Pediatrics	0.70	0.37	0.41	0.56	0.49	0.45	0.74	0.82
Obstetrics/Gynecology	0.71	1.41	0.89	1.18	1.09	0.97	2.43	1.42
Radiology	1.11	3.21	2.58	5.05	3.02	3.83	2.41	3.45
Psychiatry	0.18	0.29	0.25	0.32	0.35	0.34	0.34	0.40
Anesthesiology	1.16	0.20	0.36	0.51	0.56	0.37	0.55	0.31
Pathology	0.99	0.33	0.87	0.62	0.80	2.62	0.91	3.07
Census Division								
New England	1.51	0.52	2.02	0.48	1.09	1.12	0.82	2.18
Middle Atlantic	0.36	1.00	0.65	0.50	0.77	0.55	0.88	1.06
East North Central	0.51	0.38	0.64	0.65	0.53	0.75	0.81	0.88
West North Central	0.61	0.90	0.75	2.45	0.96	0.98	0.95	1.45
South Atlantic	0.60	0.80	0.51	1.34	0.85	0.90	0.69	1.77
East South Central	0.63	0.56	0.75	1.93	0.77	2.22	1.04	1.26
West South Central	1.03	0.97	0.87	1.04	0.79	1.09	0.99	0.96
Mountain	0.54	2.96	5.31	1.30	0.95	0.79	0.91	1.13
Pacific	0.46	0.74	0.54	1.33	2.14	1.44	1.35	1.15
Type of Practice								
Solo	0.28	0.33	0.64	0.35	0.58	0.40	0.50	0.51
Non-solo	0.37	0.72	0.51	0.90	0.55	0.67	0.48	0.89
Location								
Nonmetropolitan	0.38	0.45	0.73	0.84	0.67	0.67	0.64	0.88
Metropolitan—								
Less than 1,000,000	0.31	0.69	0.53	0.71	0.81	0.65	0.49	0.89
1,000,000 and over	0.39	0.38	0.81	0.56	0.40	0.49	0.60	0.60
Physician Age								
Less than 36 years	0.52	1.95	0.78	0.71	0.67	0.89	1.05	0.94
Less than 40 years	0.34	0.81	1.15	0.88	0.54	0.62	0.58	1.37
36-45 years	0.34	0.48	1.00	0.85	0.62	0.60	0.58	0.95
46-55 years	0.51	0.70	0.68	0.79	1.10	0.99	0.59	0.94
56-65 years	0.56	0.35	0.53	0.79	0.79	0.63	1.06	0.83
66 or more years	0.37	0.64	1.50	1.05	0.61	0.53	0.49	1.03

Physician Net Income after Expenses Before Taxes

Physician net income is defined to include all earnings from medical practice after expenses before taxes, including fringe benefits and contributions into deferred compensation plans. A special effort is made in the Socioeconomic Monitoring System surveys to ensure that deferred compensation is included in the net income that is reported.

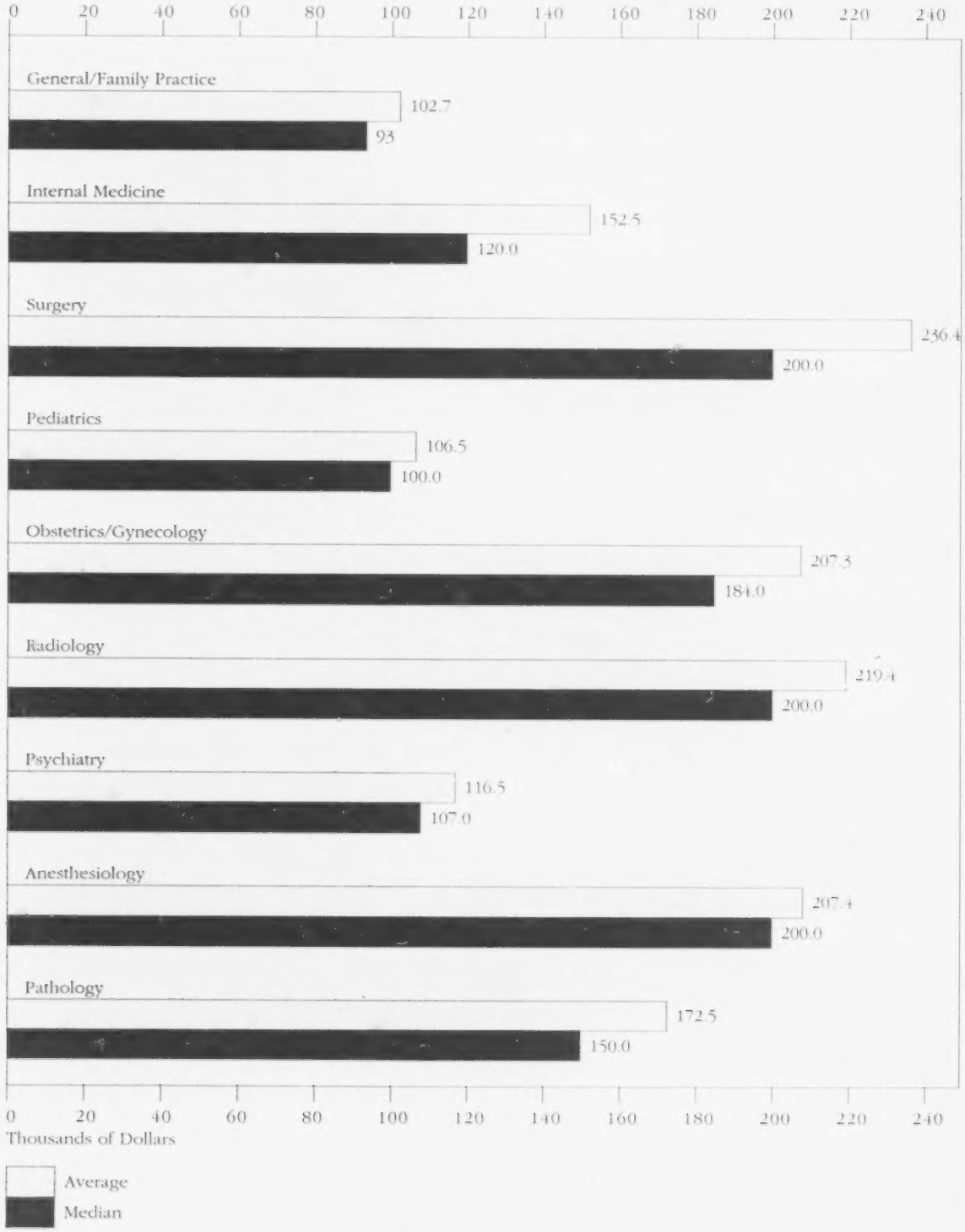
Physician average net income increased at a faster rate than inflation in 1990 (see Figure 16). However, median net income increased at a lower rate than inflation. Although average net income reached $164,300, half of physicians earned less than $130,000. As shown in Figure 17, earnings vary by specialty. The highest earnings were among surgeons; the lowest were among general/family practitioners and pediatricians.

Figure 16. **Percent Change in Average and Median Net Income after Expenses before Taxes of All Physicians, 1984-1990**



Source: AMA Socioeconomic Monitoring System 1985-1991 core surveys

Figure 17. **Average and Median Physician Net Income (in thousands of dollars) after Expenses before Taxes, by Specialty, 1990**



Source: AMA Socioeconomic Monitoring System 1991 core survey

Table 47. **Mean Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	164.3	102.7	152.5	236.4	106.5	207.3	219.4	116.5	207.4	172.5
Census Division										
New England	142.5	·	116.7	209.4	·	·	·	112.9	·	·
Middle Atlantic	156.1	96.0	144.1	238.8	91.8	187.9	237.0	109.1	195.9	149.0
East North Central	172.4	103.5	142.8	268.4	100.9	188.0	239.7	115.8	209.4	·
West North Central	151.4	106.8	144.0	162.4	·	·	·	·	·	·
South Atlantic	169.0	98.8	164.5	251.6	113.8	228.1	201.3	120.3	204.7	184.2
East South Central	169.0	111.3	156.9	234.0	·	·	·	·	·	·
West South Central	178.8	126.6	190.4	210.9	128.3	262.4	238.2	·	·	·
Mountain	170.9	93.2	232.9	275.3	·	·	·	·	·	·
Pacific	162.5	92.8	150.4	232.7	112.6	207.1	192.6	103.1	179.4	·
Type of Practice										
Solo	158.7	106.2	150.9	217.0	109.0	204.7	·	119.8	210.9	·
Non-solo	167.0	100.1	153.3	250.2	105.6	208.7	218.0	113.4	206.9	174.5
Location										
Nonmetropolitan	130.5	110.4	113.8	168.2	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	172.7	105.2	167.4	245.0	105.3	208.1	236.5	119.0	213.3	194.8
1,000,000 and over	163.3	92.7	147.0	240.0	108.2	212.1	205.8	115.2	202.8	158.2
Employment Status										
Self-employed	185.6	109.9	174.3	247.6	121.1	229.1	282.4	124.8	232.7	220.7
Non-self-employed[c]	125.5	87.6	105.1	182.7	85.8	159.4	167.8	103.8	181.3	137.4
Employee	119.8	85.1	102.6	180.9	83.8	150.6	165.5	101.8	167.6	116.3
Independent contractor	147.6	96.9	·	·	·	·	175.3	113.0	209.9	·
Physician Age										
Less than 36 years	123.6	89.8	104.7	176.1	83.1	188.3	136.7	104.5	192.7	·
Less than 40 years	148.8	99.0	137.7	222.1	91.4	212.9	179.5	103.9	202.9	156.4
36-45 years	173.6	105.6	171.8	263.0	105.5	221.3	244.9	113.5	205.1	165.9
46-55 years	191.9	120.1	163.2	263.2	114.9	221.4	241.0	128.9	219.6	182.7
56-65 years	160.8	105.9	169.5	198.9	133.5	189.5	216.9	119.2	·	·
66 or more years	100.8	75.6	86.4	140.4	·	·	·	91.0	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 47 (continued). **Standard Error of the Mean Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1990**[a]

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	2.15	2.73	5.54	6.74	3.41	8.68	9.16	3.33	6.02	8.95
Census Division										
New England	7.11	·	13.85	25.64	·	·	·	7.76	·	·
Middle Atlantic	5.22	7.45	11.89	19.22	5.85	22.55	21.10	6.04	11.49	13.67
East North Central	5.86	6.39	12.51	20.01	6.08	18.75	23.82	7.80	17.22	·
West North Central	5.93	7.12	15.00	18.24	·	·	·	·	·	·
South Atlantic	5.22	7.30	13.28	15.97	9.01	27.03	21.28	8.90	17.38	24.06
East South Central	8.49	10.09	17.78	23.65	·	·	·	·	·	·
West South Central	7.91	11.45	31.26	19.96	15.58	35.09	31.83	·	·	·
Mountain	11.35	7.68	63.79	32.79	·	·	·	·	·	·
Pacific	4.92	5.64	9.82	13.81	9.46	20.56	21.36	7.06	11.00	·
Type of Practice										
Solo	4.04	5.20	9.50	11.13	8.50	16.23	·	5.51	20.08	·
Non-solo	2.53	2.88	6.82	8.36	3.59	10.22	9.66	3.92	6.23	9.17
Location										
Nonmetropolitan	4.41	5.62	9.14	11.22	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	3.52	4.29	9.80	10.91	5.57	12.75	15.05	5.04	9.24	15.46
1,000,000 and over	3.05	4.32	7.30	9.33	4.62	12.85	12.02	4.66	7.85	12.09
Employment Status										
Self-employed	3.01	3.61	7.23	7.84	4.91	11.26	13.32	4.99	8.42	12.86
Non-self-employed[c]	2.25	3.49	5.82	9.83	3.88	10.68	9.84	3.32	7.75	10.30
Employee	2.40	3.66	6.22	10.95	3.78	9.09	10.13	3.16	8.30	7.71
Independent contractor	5.49	9.09	·	·	·	·	25.79	11.02	15.68	·
Physician Age										
Less than 36 years	3.46	6.18	6.51	13.54	6.06	17.48	14.68	7.60	9.34	·
Less than 40 years	3.56	4.58	9.20	12.56	5.26	16.50	14.27	5.15	8.87	22.28
36-45 years	3.70	3.69	10.53	11.38	4.37	16.98	13.43	5.72	10.08	15.50
46-55 years	4.90	8.38	8.37	13.83	7.81	16.83	19.88	7.65	13.35	14.22
56-65 years	5.19	7.27	18.15	12.77	14.45	15.62	23.72	7.49	·	·
66 or more years	5.03	7.78	8.39	17.65	·	·	·	6.01	·	·

Table 48. **Mean Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	104.1	108.4	112.2	119.5	132.3	144.7	155.8	164.3
Specialty								
General/Family Practice	66.9	71.6	77.9	80.3	91.5	94.6	95.9	102.7
Internal Medicine	94.6	104.2	102.0	109.4	121.8	130.9	146.5	152.5
Surgery	144.3	151.0	155.0	162.4	187.9	207.5	220.5	236.4
Pediatrics	70.8	73.7	76.2	81.8	85.3	94.9	104.7	106.5
Obstetrics/Gynecology	118.1	118.8	124.3	135.9	163.2	180.7	194.3	207.3
Radiology	144.3	139.7	144.3	168.8	180.7	188.5	210.5	219.4
Psychiatry	79.2	85.1	87.2	91.5	102.7	111.4	111.7	116.5
Anesthesiology	141.6	143.9	142.7	150.2	163.1	194.5	185.8	207.4
Pathology	114.4	115.1	124.8	137.7	124.6	131.0	154.5	172.5
Census Division								
New England	84.9	87.8	106.0	107.1	110.6	132.9	128.3	142.5
Middle Atlantic	98.7	99.3	106.6	114.6	126.1	135.0	152.5	156.1
East North Central	111.1	109.8	119.3	126.6	137.6	147.0	155.6	172.4
West North Central	107.7	109.1	112.1	120.7	133.9	138.0	159.2	151.4
South Atlantic	104.5	113.6	111.2	119.6	135.8	156.0	165.6	169.0
East South Central	111.3	121.8	114.8	122.6	141.2	164.8	173.0	169.0
West South Central	122.9	122.2	124.6	129.0	140.4	160.7	170.5	178.8
Mountain	89.2	101.5	95.9	108.5	125.5	132.1	142.6	170.9
Pacific	100.5	109.2	112.0	119.0	135.4	136.0	148.1	162.5
Type of Practice								
Solo	98.7	104.8	111.0	115.5	127.8	140.4	153.6	158.7
Non-solo	108.5	111.2	113.0	122.1	135.0	147.1	156.9	167.0
Location								
Nonmetropolitan	86.9	91.3	93.3	107.7	117.9	120.9	129.4	130.5
Metropolitan—								
Less than 1,000,000	108.7	115.2	117.2	124.5	140.4	154.1	164.1	172.7
1,000,000 and over	103.8	106.3	111.6	117.5	127.9	140.6	153.4	163.3
Physician Age								
Less than 36 years	77.3	79.6	84.3	90.3	96.1	108.1	113.3	123.6
Less than 40 years	90.1	96.1	98.1	105.9	117.1	130.9	137.9	148.8
36-45 years	106.7	117.4	115.7	124.3	138.8	152.1	163.0	173.6
46-55 years	129.9	126.0	133.6	140.2	151.9	166.8	180.6	191.9
56-65 years	101.1	103.0	111.9	119.7	131.2	140.5	151.7	160.8
66 or more years	72.0	81.7	88.6	83.0	95.7	102.2	112.2	100.8

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 48 (continued). **Standard Error of the Mean Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1983-1990[a]**

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	1.38	1.29	1.37	1.41	1.88	1.86	2.15	2.15
Specialty								
General/Family Practice	1.71	1.73	1.95	2.15	2.74	2.25	2.27	2.73
Internal Medicine	3.57	3.39	3.23	3.02	3.57	3.91	5.13	5.54
Surgery	4.14	4.08	4.34	4.10	6.21	5.57	6.38	6.74
Pediatrics	3.55	2.53	2.50	2.38	2.75	3.01	4.10	3.41
Obstetrics/Gynecology	4.86	3.82	4.30	4.67	10.31	9.56	9.55	8.68
Radiology	4.75	4.76	4.55	5.23	6.25	6.50	10.17	9.16
Psychiatry	2.61	2.21	3.06	2.69	3.56	4.37	3.50	3.33
Anesthesiology	3.97	4.38	5.17	4.30	4.98	7.44	5.88	6.02
Pathology	4.50	4.63	5.92	5.76	5.70	6.36	8.94	8.95
Census Division								
New England	3.60	3.45	4.94	4.81	4.23	6.13	5.44	7.11
Middle Atlantic	3.99	2.84	3.00	3.53	3.84	4.19	4.99	5.22
East North Central	3.96	3.17	4.05	4.10	6.06	5.05	5.07	5.86
West North Central	6.02	5.17	6.22	5.02	5.77	6.09	7.01	5.93
South Atlantic	3.01	3.44	3.53	3.08	3.81	4.40	6.46	5.22
East South Central	5.24	6.00	5.96	6.63	7.51	9.07	10.12	8.49
West South Central	4.48	4.58	4.56	4.87	7.65	7.41	6.85	7.91
Mountain	4.36	4.31	4.02	5.00	6.39	6.75	8.77	11.35
Pacific	2.96	3.12	3.05	3.50	4.83	4.09	4.87	4.92
Type of Practice								
Solo	2.07	2.00	2.13	2.26	3.10	3.31	3.86	4.04
Non-solo	1.84	1.67	1.79	1.81	2.37	2.24	2.58	2.53
Location								
Nonmetropolitan	2.72	3.07	3.19	4.33	4.13	4.39	5.69	4.41
Metropolitan—								
Less than 1,000,000	2.02	2.19	2.18	2.11	3.37	2.91	3.44	3.52
1,000,000 and over	2.20	1.75	2.01	2.11	2.35	2.73	3.03	3.05
Physician Age								
Less than 36 years	2.34	2.49	2.59	2.53	2.78	3.44	4.15	3.46
Less than 40 years	1.93	1.96	1.96	2.05	2.46	3.13	3.27	3.56
36-45 years	2.24	2.35	2.15	2.39	3.39	3.38	3.51	3.70
46-55 years	3.42	2.91	3.27	3.40	4.77	4.05	4.58	4.90
56-65 years	3.09	2.34	3.10	3.08	3.54	3.97	4.68	5.19
66 or more years	3.11	4.30	5.73	3.28	4.19	4.41	9.44	5.03

Table 49. **Twenty-fifth Percentile Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1990[a]**

		Specialty								
	All Physicians[b]	GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	90	65	82	135	70	125	130	80	150	107
Census Division										
New England	90	·	72	120	·	·	·	78	·	·
Middle Atlantic	88	68	80	135	54	105	170	80	148	100
East North Central	93	60	80	150	75	125	167	90	140	·
West North Central	90	65	85	100	·	·	·	·	·	·
South Atlantic	90	63	90	140	70	140	122	77	130	90
East South Central	92	76	90	138	·	·	·	·	·	·
West South Central	90	80	100	108	71	130	122	·	·	·
Mountain	85	63	92	150	·	·	·	·	·	·
Pacific	90	60	90	140	80	130	100	78	135	·
Type of Practice										
Solo	80	63	78	120	61	112	·	75	156	·
Non-solo	92	70	88	150	71	130	130	83	150	109
Location										
Nonmetropolitan	80	72	85	130	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	92	72	88	140	70	124	140	84	159	120
1,000,000 and over	90	60	80	135	71	130	120	75	148	100
Employment Status										
Self-employed	100	70	95	140	80	140	195	78	180	170
Non-self-employed[c]	80	60	70	120	54	96	100	80	130	90
Employee	77	60	68	110	54	90	100	80	122	90
Independent contractor	93	65	·	·	·	·	100	81	160	·
Physician Age										
Less than 36 years	69	50	65	100	45	110	80	77	150	·
Less than 40 years	80	62	74	126	54	125	100	75	148	100
36-45 years	97	75	92	159	75	144	180	77	140	99
46-55 years	107	75	110	145	70	110	150	90	170	109
56-65 years	90	71	80	130	87	139	140	83	·	·
66 or more years	52	38	57	64	·	·	·	64	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 50. **Median Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1990[a]**

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	130	95	120	200	100	184	200	107	200	150
Census Division										
New England	120	·	100	175	·	·	·	107	·	·
Middle Atlantic	125	80	119	197	95	150	210	100	200	120
East North Central	140	95	112	229	97	156	230	115	180	·
West North Central	130	106	125	140	·	·	·	·	·	·
South Atlantic	133	87	120	202	100	166	180	100	197	170
East South Central	140	94	120	220	·	·	·	·	·	·
West South Central	150	100	144	181	105	200	207	·	·	·
Mountain	135	94	153	270	·	·	·	·	·	·
Pacific	135	80	140	200	100	190	166	105	180	·
Type of Practice										
Solo	125	92	117	175	100	162	·	115	190	·
Non-solo	135	93	120	215	100	188	195	107	200	150
Location										
Nonmetropolitan	115	98	100	160	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	140	94	130	200	90	187	203	107	200	170
1,000,000 and over	130	84	115	202	100	186	190	109	200	136
Employment Status										
Self-employed	150	100	150	210	110	200	265	120	250	220
Non-self-employed[c]	110	80	93	165	80	150	150	100	180	120
Employee	105	80	90	162	82	150	159	97	165	107
Independent contractor	150	84	·	·	·	·	150	110	200	·
Physician Age										
Less than 36 years	100	80	90	155	80	166	150	100	190	·
Less than 40 years	115	91	100	190	80	190	167	100	200	118
36-45 years	139	97	127	250	100	190	240	105	200	155
46-55 years	158	106	150	220	106	200	200	120	200	158
56-65 years	138	91	140	160	110	174	180	110	·	·
66 or more years	90	65	87	120	·	·	·	90	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 51. **Seventy-fifth Percentile Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1990[a]**

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	200	125	180	300	130	260	275	138	250	225
Census Division										
New England	170	·	130	250	·	·	·	125	·	·
Middle Atlantic	200	112	180	280	116	210	263	125	231	225
East North Central	200	127	170	330	132	210	320	140	250	·
West North Central	193	150	175	200	·	·	·	·	·	·
South Atlantic	208	113	208	305	137	275	245	148	255	280
East South Central	230	162	215	294	·	·	·	·	·	·
West South Central	230	142	192	275	130	400	280	·	·	·
Mountain	210	116	200	341	·	·	·	·	·	·
Pacific	200	120	190	310	122	270	249	130	210	·
Type of Practice										
Solo	200	130	185	275	120	260	·	150	250	·
Non-solo	208	123	180	310	130	270	270	128	250	225
Location										
Nonmetropolitan	165	130	150	201	·	·	·	·	·	·
Metropolitan—										
Less than 1,000,000	215	130	200	305	120	286	300	130	250	250
1,000,000 and over	200	115	175	300	135	251	265	140	250	208
Employment Status										
Self-employed	233	135	210	310	150	300	330	150	275	250
Non-self-employed[c]	150	105	120	220	104	200	202	125	219	158
Employee	145	104	120	220	104	205	202	123	200	135
Independent contractor	190	120	·	·	·	·	200	130	250	·
Physician Age										
Less than 36 years	158	107	116	230	104	290	175	125	233	·
Less than 40 years	185	115	150	280	108	286	245	125	250	170
36-45 years	210	128	200	306	128	260	280	130	250	195
46-55 years	230	150	210	332	140	290	310	150	270	230
56-65 years	190	123	180	270	153	238	270	150	·	·
66 or more years	125	112	125	200	·	·	·	110	·	·

Source: 1991 AMA Socioeconomic Monitoring System core survey. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. All data are weighted to adjust for nonresponse bias. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

b. Includes physicians in specialties not listed separately.

c. Equivalent to the employee category published in previous editions. See Appendix D for further explanation of employment status breakouts.

· Indicates fewer than 20 observations.

Table 52. **Twenty-fifth Percentile Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	60	63	65	70	74	80	85	90
Specialty								
General/Family Practice	42	45	50	53	58	60	63	65
Internal Medicine	57	66	62	67	70	77	80	82
Surgery	87	90	87	95	102	117	120	135
Pediatrics	42	46	50	55	55	60	63	70
Obstetrics/Gynecology	70	80	80	89	100	100	110	125
Radiology	90	90	89	120	110	117	120	130
Psychiatry	54	60	55	65	73	74	80	80
Anesthesiology	100	98	99	110	115	126	120	150
Pathology	70	80	78	85	80	85	92	107
Census Division								
New England	51	60	62	70	70	80	80	90
Middle Atlantic	55	57	63	68	70	76	88	88
East North Central	62	70	65	74	73	80	80	93
West North Central	60	63	59	75	78	78	87	90
South Atlantic	60	62	62	68	75	87	84	90
East South Central	65	65	65	65	75	85	88	92
West South Central	70	70	70	71	75	82	90	90
Mountain	54	60	60	60	70	70	80	85
Pacific	60	68	70	70	78	80	85	90
Type of Practice								
Solo	55	60	60	65	71	74	79	80
Non-solo	63	66	65	71	75	82	90	92
Location								
Nonmetsopolitan	52	50	60	66	70	70	75	80
Metropolitan—								
Less than 1,000,000	63	65	68	71	75	84	87	92
1,000,000 and over	58	65	63	70	74	79	86	90
Physician Age								
Less than 36 years	45	45	49	58	55	60	63	69
Less than 40 years	50	55	58	64	67	72	76	80
36-45 years	62	71	70	75	77	85	90	97
46-55 years	77	76	80	83	88	95	100	107
56-65 years	60	64	65	70	77	80	85	90
66 or more years	35	40	45	49	53	55	55	52

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 53. **Median Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	88	92	94	100	108	120	125	130
Specialty								
General/Family Practice	60	64	70	75	80	85	90	93
Internal Medicine	83	90	90	95	100	109	120	120
Surgery	124	128	129	141	153	180	180	200
Pediatrics	62	67	70	75	77	85	93	100
Obstetrics/Gynecology	104	110	120	127	145	150	164	184
Radiology	128	122	135	155	170	161	180	200
Psychiatry	70	80	80	82	90	97	100	107
Anesthesiology	137	145	153	149	150	180	180	200
Pathology	102	105	115	120	100	130	148	150
Census Division								
New England	77	80	94	92	98	110	117	120
Middle Atlantic	80	85	90	95	100	110	125	125
East North Central	90	98	100	101	105	119	122	140
West North Central	85	90	85	105	114	120	126	130
South Atlantic	89	91	94	100	115	127	128	133
East South Central	100	100	92	100	111	132	127	140
West South Central	105	105	100	106	110	130	140	150
Mountain	80	91	85	90	110	110	120	135
Pacific	90	95	97	100	110	115	124	135
Type of Practice								
Solo	83	90	94	98	108	116	120	125
Non-solo	90	94	95	100	107	120	126	135
Location								
Nonmetropolitan	78	78	84	90	100	100	107	115
Metropolitan—								
Less than 1,000,000	92	97	100	104	110	125	130	140
1,000,000 and over	86	92	93	98	105	115	125	130
Physician Age								
Less than 36 years	65	68	72	78	80	86	95	100
Less than 40 years	76	80	84	90	95	102	110	115
36-45 years	90	100	100	103	111	120	129	139
46-55 years	110	110	115	120	128	140	150	158
56-65 years	86	92	93	100	110	118	127	138
66 or more years	60	68	73	70	80	85	83	90

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Table 54. **Seventy-fifth Percentile Physician Net Income (in thousands of dollars) after Expenses before Taxes, 1983-1990**[a]

	1983	1984	1985	1986	1987	1988	1989	1990
All Physicians	130	135	140	150	163	180	195	200
Specialty								
General/Family Practice	85	89	95	100	110	114	115	125
Internal Medicine	119	127	123	130	146	156	175	180
Surgery	176	183	196	200	230	260	279	300
Pediatrics	85	92	92	100	110	120	134	130
Obstetrics/Gynecology	150	150	159	170	195	230	238	260
Radiology	185	185	195	210	225	231	250	275
Psychiatry	95	105	105	106	116	130	136	138
Anesthesiology	174	185	170	195	200	250	230	250
Pathology	145	144	150	170	175	153	200	225
Census Division								
New England	101	105	132	130	140	155	160	170
Middle Atlantic	120	125	135	140	150	160	180	200
East North Central	140	133	150	150	160	180	190	200
West North Central	135	130	139	142	162	166	203	193
South Atlantic	131	140	135	150	170	200	205	208
East South Central	141	163	140	146	180	213	205	230
West South Central	160	150	160	160	175	210	225	230
Mountain	105	125	124	140	162	175	175	210
Pacific	126	140	132	150	170	168	180	200
Type of Practice								
Solo	124	130	142	145	153	180	185	200
Non-solo	135	139	139	150	170	180	197	208
Location								
Nonmetropolitan	115	120	120	129	146	150	150	165
Metropolitan—								
Less than 1,000,000	139	144	150	159	175	200	200	215
1,000,000 and over	127	130	137	145	156	175	190	200
Physician Age								
Less than 36 years	97	100	100	110	115	127	137	158
Less than 40 years	112	120	120	130	139	157	162	185
36-45 years	135	150	142	150	170	185	200	210
46-55 years	154	155	160	175	182	205	220	230
56-65 years	121	125	140	150	165	178	180	190
66 or more years	91	100	101	100	120	131	135	125

Source: 1984-1991, AMA Socioeconomic Monitoring System core surveys. The population from which samples are drawn includes only active nonfederal patient care physicians, excluding residents.

a. Data, other than in the specialty breakdown, are based on responses from physicians in all specialties. All data are weighted to adjust for nonresponse bias. This will cause figures to differ from those reported in previous editions of this volume. See Appendix B for information on weighting and computation procedures. See Appendix D for information on definitions.

Appendices

The Design and Methodology of the AMA Socioeconomic Monitoring System
Weighting and Computation Methodology
SMS Questionnaire Summary
Definitions of Variables

Appendix A
The Design and Methodology of the AMA Socioeconomic Monitoring System[a]

The Socioeconomic Monitoring System (SMS) was developed in 1981 in response to the need of physicians and policymakers for more timely and frequent socioeconomic information on the practice of medicine than had been available in the past. This program represents an outgrowth of 20 years of AMA experience in monitoring socioeconomic aspects of medical practice. Its predecessor, the Periodic Survey of Physicians (PSP) collected similar information on an annual basis. The tenth full program year for SMS was completed in 1991.

SMS is designed to provide periodic information on a range of characteristics of medical practice, such as physicians' earnings, expenses, work patterns, and fees. In addition, a portion of each SMS survey is devoted to collecting information regarding current issues facing physicians.

The purpose of this article is to provide a description of the current SMS program design. The first section provides an overview of program characteristics. This is followed by discussions of the SMS survey sample design, questionnaire content, field procedures, and aspects of reporting SMS results.

Overview of SMS Program Characteristics

In 1991, only the annual core survey was conducted. The purpose of the annual core survey is to provide current data on a full range of economic and practice characteristics each year. The average core survey interview lasts 25 minutes and obtains data from approximately 4,000 physicians.

The 1991 core survey was fielded from March through July. The timing of the beginning of the core survey is designed to coincide with the income tax return filing deadline in order to improve the reliability of information that can be obtained on physician earnings and practice expenses for the previous year.

Compared with one survey in 1991 and two surveys in 1986, 1987, 1988, 1989 and 1990, three surveys were fielded in 1985, and four were fielded in each prior year of the SMS program. The additional surveys in previous years were similar in nature to the current supplemental survey. While the number of respondents to core surveys has been approximately 4,000 every year, supplemental surveys prior to 1986 included only about 1,200 respondents each. Supplemental surveys during the period 1987-1990 included 2,800 respondents per survey.

Sample Design

The Socioeconomic Monitoring System (SMS) surveys are designed to provide representative information on the population of all nonfederal physicians who spend the greatest proportion of their time in patient care activities. This includes both office and hospital-based physicians, but excludes residents. Samples for SMS surveys are selected from the AMA Physician Masterfile. The Masterfile contains current and historical information on every Doctor of Medicine in the United States, including both members and nonmembers of the AMA. Graduates of U.S. medical schools who are temporarily practicing overseas, and graduates

a. This appendix is an update of an article, prepared by Mary Lou S. White, which appeared in the 1985 edition of *Socioeconomic Characteristics of Medical Practice*.

of foreign medical schools who live in the U.S. are also included on the file.

Data included on the Masterfile are obtained from primary sources, including many organizations and institutions. The only information obtained directly from individual physicians concerns current professional activities and preferred mailing addresses. These data are obtained on a quadrennial basis from the entire U.S. physician population and on a monthly basis from those physicians with changes in address or professional status. These changes may be signaled by input from professional organizations, AMA mailings, or by physician correspondence.

The physician phone numbers are obtained from the Record of Physicians' Professional Activities (PPA), a mail questionnaire survey which has been sent every four years since 1969 to all physicians residing in the United States as well as the U.S. physicians residing temporarily overseas. The phone numbers from the PPA file are 98% complete; 75.2% of the completed phone numbers are accurate.

In addition to limiting the SMS sample to nonfederal patient care physicians who have completed their residency programs, the following exclusions are made:

- Doctors of Osteopathy;
- graduates of foreign medical schools who are only temporarily licensed to practice in the United States;
- physicians for whom no current address is available;
- physicians who were sampled in SMS surveys during the last five years;
- physicians who specify "do not contact" on the Masterfile;
- physicians who are currently practicing in Canal Zone, Puerto Rico or Virgin Islands; and
- physicians who are AMA officers or trustees.

The sample design utilized for SMS is a random sampling of eligible physicians on the AMA Physician Masterfile by assigning random numbers to each member of the population and selecting the 6,000 lowest ones. Once the sample is selected, it is compared to the eligible population on the basis of nine major specialty groupings and ten geographical regions. The specialty and region definitions are shown in Table 1. These comparisons are reviewed to ensure that the sample accurately reflects the eligible population. The sample is then divided into 12 replicates of 500 each.

In order to provide reliable estimates of short-term changes in certain indicators, SMS samples are designed to include a panel component. The panel consists of a portion of the sample from one SMS survey which is reinterviewed in a subsequent SMS survey. Approximately 40% of the completed interviews are typically conducted as reinterviews with physicians who had been initially interviewed in a similar survey in the previous year. The SMS program uses annual reinterviews of this type in order to monitor annual changes in various characteristics.

Questionnaire Content

The SMS questionnaire consists of three distinct sections:

- screening questions to verify the physician's self-designated practice specialty and eligibility for the survey;
- a main questionnaire to collect information on practice characteristics, hours worked, volume of services, fees for selected procedures, income, and expenses; and
- special topics questions to provide information on emerging socioeconomic issues.

Questions for the main questionnaire were developed from a review of past surveys and through consultation with physicians, sources within the AMA, and Mathematica Policy Research, Inc., an independent consulting firm that assisted in the development of the SMS program. Efforts were made to maintain consistency of questions with those from the PSP from which trend information has been established over a period of years. However, modifications are made where it is deemed that the desired information would be more accurate if questions were changed. In addition, questions in the SMS surveys are designed so that physicians are asked only questions that are generally relevant to their specialty. A summary of the questionnaire used in the SMS surveys upon which this volume is based is included in Appendix C.

Table 1. **SMS Survey Sample Strata**

Specialty Strata[a]

1. General Practice, Family Practice
2. Allergy, Cardiovascular Diseases, Gastroenterology, Internal Medicine, Pulmonary Diseases
3. General Surgery, Neurosurgery, Ophthalmology, Orthopedic Surgery, Plastic Surgery, Colon and Rectal Surgery, Thoracic Surgery, Urology
4. Pediatrics, Pediatric Allergy, Pediatric Cardiology
5. Obstetrics and Gynecology
6. Radiology, Diagnostic Radiology, Therapeutic Radiology
7. Psychiatry, Child Psychiatry
8. Anesthesiology
9. Aerospace Medicine, Neurology, Occupational Medicine, Physical Medicine and Rehabilitation, General Preventive Medicine, Public Health, Dermatology, Pathology, Forensic Pathology, Other Specialty, Unspecified

State Strata

1. Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
2. New York
3. Delaware, New Jersey, Pennsylvania, West Virginia
4. District of Columbia, Georgia, Maryland, North Carolina, South Carolina, Virginia
5. Alabama, Florida, Kentucky, Mississippi, Tennessee
6. Arkansas, Louisiana, Missouri, Oklahoma, Texas
7. Indiana, Michigan, Ohio
8. Illinois, Iowa, Minnesota, Wisconsin
9. Alaska, Arizona, Colorado, Hawaii, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, South Dakota, Oregon, Utah, Wyoming, Washington
10. California

a. The AMA Physician Masterfile classification of self-designated practice specialties is used in the specialty strata listing.

Special topics covered in the 1991 core survey include:

- hospital arrangements;
- practice parameters;
- Medicare procedures;
- reimbursement from private payers;
- electronic billing; and
- hospital kickbacks.

Special topics questions are formulated and reviewed by members of AMA staff representing a broad range of activity areas. All questions that have not been used previously in SMS surveys are pretested prior to the survey fielding to evaluate the wording and ordering of questions and to determine the ability of respondents to provide the desired information.

Field Procedures

The SMS data collection plan is designed to provide reliable information within a tight time schedule. The survey is completed primarily by telephone. Telephone administration significantly reduces the time required to produce survey results and increases the response rate. The 1991 survey was administered by independent consulting firms contracted by the AMA. Mathematica Policy Research, Inc., of Princeton, NJ, conducted the interviews for all surveys for the SMS program since the second quarter of 1983.

Field procedures developed for SMS surveys reflect a complex effort to minimize bias from nonresponse and accommodate the busy schedules of physicians through careful advance preparation and intensive follow-up efforts to complete interviews. The activities involved in this effort are described below.

Advance Letter. Two weeks prior to data collection, advance letters are sent to each physician selected to be interviewed or reinterviewed. Each letter includes a brief description of the interview, the project sponsorship, identification of the survey contractor, information that the physician will be receiving a telephone call from an interviewer on the contractor's staff, and a pledge of data confidentiality. Each letter is printed on AMA letterhead and bears the signature of James S. Todd, M.D., executive vice president of the American Medical Association. If a letter is returned because of an insufficient address, a search is initiated to obtain updated information so the physician may be sent another letter.

When the SMS program was initiated, many physicians indicated that they could not provide certain types of information during a telephone interview without advance preparation. As a result, questionnaire summaries were designed to provide the physician with a listing of the specific medical and surgical procedures for which fees will be re-

quested, as well as with a description of income and expense questions. Since the third-quarter 1983 survey, this insert has been enclosed with each advance letter.

Telephone Search. Because inadequate coverage is a potential problem for telephone surveys, the AMA Division of Survey and Data Resources expends considerable effort to locate sample physicians. The basic sources used in the telephone look-up include directory assistance, state and county medical societies, state licensing boards, and hospitals. If it is impossible to obtain a telephone listing for a physician from these sources, the next steps include reverifying the physician's data contained on the AMA Physician Masterfile; contacting state, county, and specialty societies; initiating traces of physicians from former addresses appearing on the Masterfile; and checking medical society directories. This ensures that the proportion of physicians in each sample stratum most accurately reflects that of the population. Approximately one week prior to data collection, the survey contractor is provided names, addresses, and telephone numbers of physicians selected from the AMA Physician Masterfile.

Interviewer Training. Two days of study-specific training in addition to general training are provided to each interviewer before working on SMS surveys. Training includes a detailed review of each question (including instruction on pronunciation of various medical terms), practice interviews, and a review of interviewing and administrative procedures. AMA staff actively participate in the training process either in person or via teleconferencing to assure that all project specifications and instructions are clearly communicated, understood, and implemented.

During training, the contractor actively evaluates each potential interviewer for appropriate survey skills, such as reading ability, voice quality, grasp of the material, and ability to develop rapport with physicians. The highest quality interviewers are then selected to work on the project.

Interview Process. Interviewing is conducted via a Computer Assisted Telephone Interviewing (CATI) process. This system produces a copy of the questionnaire on a computer screen. Responses to the questions are entered directly into the computer using this on-line system during the actual interview, eliminating any keypunching or separate data entry task. This reduces time schedules and maximizes quality by minimizing sources of error. In addition, this system has provided the ability to program range checks whereby a figure that is entered that exceeds the usual range automatically instructs CATI to prompt the interviewer to verify the response. This has helped reduce the number of invalid outlying responses.

Table 2. **Number of Completed Interviews and Response Rates for the 1989 and the 1990 Core Surveys**

Core Survey	Number of Completed Interviews	Response Rate
1989	4,104	72.1%
1990	4,022	69.1%
1991	4,057	66.7%

A minimum of a 60% response rate for each specialty is required in order to regard an SMS survey as complete. Vigorous efforts are made to achieve the cooperation of physicians and meet this standard because of the short field period of SMS surveys. These efforts include the following:

- Appointments for interviews are scheduled at the convenience of physicians at any time 13 hours a day from Monday through Saturday.
- A toll-free number allows physicians to complete the interview at their convenience.
- An optional mail questionnaire, tailored to each specialty and type of practice, is made available to physicians who indicate a preference for responding to the survey in writing rather than by telephone.
- Repeated callbacks (a minimum of four) to nonrespondents are made before abandoning efforts to interview the physician.
- Letters encouraging participation and addressing specific objectives are sent to physicians who initially refuse to be interviewed.
- Refusal conversion attempts are made by a select group of interviewers. A substantial number of physicians decide to grant an interview at this stage.

The response rates achieved on the 1989, 1990 and 1991 core surveys are shown in Table 2. The results indicate the success of SMS in meeting its minimum 60% response rate standard.

Confidentiality. Data are entered via the CATI system and are released only in aggregate form without any individual respondent identifying information.

Quality Control. Each interviewer's work is monitored by the contractor's supervisory staff for both production and quality. AMA staff also monitor interviews by remote telephone hook-up to ensure that a high level of quality is maintained throughout the survey. If indicated, the contractor is instructed to retain interviewers or remove interviewers from the SMS study.

AMA staff also track the SMS survey production. A detailed review is made of all sample disposition, both pending and final, on a weekly basis. As a result of this evaluation, the time schedule is reviewed and necessary recommendations are made to the contractor to enable the survey to be completed during the allotted field period.

As part of the annual SMS program review, the design and methodology are examined with an eye for identifying areas for improvement. In 1986, the Center for Health Policy Research and the Division of Survey and Data Resources jointly undertook an evaluation of the impact of survey and item nonresponse rates and various potential methods for adjusting results to correct for nonresponse. The findings of that study and the consequent change in the methodology for computing statistical summary measures of SMS data are reported in Appendix B.

Reporting of SMS Results

Results obtained from SMS surveys are widely disseminated. In order to reach the physician community, results are published periodically in *AMNews*. Dissemination of information pertinent to the public is handled by the AMA Department of News and Information. *Socioeconomic Characteristics of Medical Practice* is an annual volume designed to provide more detailed results from SMS surveys than can generally be provided through other media.

Data from the SMS also serve as a basis for research on health policy issues. Analyses of such issues are disseminated through professional journals and conferences. This ensures that health policy analysts and researchers are apprised of important findings resulting from this program. Results from SMS surveys are reported at differing levels of detail depending on the nature of the media and the degree of precision of the estimates of physician characteristics deemed appropriate for the report. As indicated previously, data are never reported in any fashion that would allow identification of an individual respondent. Discussions of definitions and computation procedures employed in reporting SMS results are contained in Appendices B and D.

Conclusion

The SMS exemplifies a long-term commitment on the part of the AMA to obtain valid and reliable socioeconomic information on the practice of medicine. The SMS program complements AMA's other extensive data collection activities and its evolution represents a responsiveness to the need for the highest achievable data quality.

Appendix B
Weighting and Computation Methodology[a]

The AMA's Socioeconomic Monitoring System (SMS) is designed to measure key indicators of the changing medical practice environment in a cost-effective fashion. Cost-effectiveness demands that only a limited percentage of the physician population be contacted each year. Specifically, SMS is based on a random sample drawn from the AMA Physician Masterfile's enumeration of all nonfederal patient care physicians, excluding resident physicians. As such, SMS shares with all sample surveys the limitations that grow out of finite sample size. Thus, SMS is designed to produce reliable estimates for the ten specialty groups and nine census divisions defined in Appendix A of this volume, but is less well suited to provide estimates of the practice environment for more detailed subspecialty or geographic breakdowns. The program is designed to provide estimates of both the yearly level of each indicator as well as measures of change over time.

By design, SMS should measure the changing environment accurately but with some margin for error. There are some sources of imprecision that occur in survey work that can increase the margin for error and introduce bias into the estimates. Variations in response rates across known subpopulations can significantly reduce the ability of a sample survey to describe accurately the changing experience of the population of interest. For example, high response rates from AMA members and low response rates for nonmembers could reduce SMS's ability to represent the experience of the average physician if the experiences of these groups differ.

Even with relatively high response rates, variations in the rates may be sufficient to cause problems in reliably reporting the experiences of physicians. This appendix discusses the record of the SMS program in achieving representative samples, describes the standard statistical technique used to correct for this type of problem, and indicates the computation formulas for statistics reported in this volume.

Since its inception in late 1981, the SMS program has been continuously scrutinized and improved as our experience with this telephone survey program has increased. In 1986, a review of the problems of unit nonresponse and item nonresponse for key variables collected by SMS was undertaken.

Unit nonresponse occurs when no information at all is collected from a sampled physician because the physician is unlocatable, cannot be contacted, or refuses to be interviewed. Item nonresponse occurs when a physician agrees to be interviewed but chooses not to answer a specific item within the survey. Weighting, imputation, and regression techniques were applied to SMS data and results were compared. There are no clear criteria that permit one to choose the statistical correction most likely to represent the true population value for any indicator. In the case of the SMS variables analyzed, the results for weighting, imputation, and regression corrections for nonresponse were closer to each other than to the unweighted data traditionally reported in the *Socioeconomic Characteristics of Medical Practice*. The results suggested that the weights be based on a limited number of physician characteristics known from Masterfile data and should correct for unit nonresponse.

The results reported in this volume were obtained using a weighting scheme developed for each of the SMS core surveys. The weights were derived by

a. This appendix is an update of an appendix prepared by Sara L. Thran and William D. Marder, which appeared in the 1988 edition of *Socioeconomic Characteristics of Medical Practice*.

Table 1. **Response Rates for SMS Survey by Demographic and Practice Characteristics, 1991**

	Response Rate		Sample Size	
	Initial	Reinterview	Initial	Reinterview
All Sampled Eligible Physicians	63.0%	75.1%	4197	1882
Years since M.D.				
0-9	68.3[a]	76.1[c]	1130	510
10-19	60.8	76.8	1417	615
20-29	60.0	72.8	1002	449
30-39	60.8	70.7	500	249
40 or more	71.0	84.8	148	59
Specialty				
General/Family Practice	61.2[a]	76.3[b]	562	283
Internal Medicine	54.6	69.0	984	374
Surgery	60.7	70.8	844	397
Pediatrics	70.1	78.3	328	129
Obstetrics/Gynecology	63.7	76.6	300	128
Radiology	69.4	76.5	222	119
Psychiatry	69.1	79.8	285	129
Anesthesiology	71.8	80.8	216	104
Pathology	74.8	85.4	99	48
Other	70.0	81.9	357	171
Board Certified				
Yes	61.9	74.1	3157	1397
No	66.3	77.9	1040	485
AMA Membership				
Member	67.2[a]	75.7	1978	1025
Nonmember	59.3	74.3	2219	857

a. Within-category differences for the initial sample statistically significant at the p=.001 level.
b. Within-category differences for the reinterview sample statistically significant at the p=.05 level.

first dividing the AMA Physician Masterfile population (using the year-end file from the previous year) and the survey respondents into 200 cells defined by specialty (ten categories), years since M.D. (five categories), AMA membership status (two categories), and board certification status (two categories). Unit response weights were constructed as the ratio of the proportion of physicians in the population to the proportion of SMS respondents in each cell. Second, an eligibility correction was employed. Nonfederal patient care physicians (excluding residents) are eligible for SMS. The eligibility correction divides the subset of the SMS population for which eligibility is known into 40 cells (according to years in practice, AMA membership, sex, and board certification) and calculates the proportion of physicians in each cell who are eligible. This defines the eligibility weight. The overall weight applied for a given respondent is the product of a unit response weight and an eligibility weight.

Table 1 contains information from the 1991 core survey that suggests the need for weighting. Each SMS survey has two components, an initial sample, and an annual reinterview component. Table 1 shows the response rates and sample sizes for these two groups of respondents. The reinterview

Table 2. **Mean Weights for Socioeconomic Monitoring System 1991 Core Survey**

	All Physicians[b]	Specialty								
		GP/FP	Int Med	Surg	Ped	Ob/Gyn	Rad	Psych	Anes	Path
All Physicians	1.00	1.03	1.15	1.04	0.91	0.97	0.93	0.90	0.90	0.84
Census Division										
New England	1.05	1.09	1.31	1.07	0.95	0.91	0.87	0.87	0.97	1.04
Middle Atlantic	1.01	1.06	1.14	1.02	1.00	0.99	0.93	0.91	0.90	0.74
East North Central	0.98	0.95	1.08	1.04	0.87	1.00	0.99	1.01	0.92	0.92
West North Central	0.97	0.96	1.17	1.04	0.81	1.00	0.94	0.83	0.82	0.79
South Atlantic	0.99	1.06	1.16	1.02	0.90	0.87	0.89	0.89	0.93	0.80
East South Central	0.99	1.01	1.15	1.00	0.82	0.98	0.77	0.82	0.85	1.01
West South Central	0.97	1.02	1.06	1.04	0.93	1.05	0.86	0.91	0.83	0.73
Mountain	0.98	1.08	1.13	1.02	0.85	0.86	0.90	0.92	0.88	1.66
Pacific	1.03	1.08	1.18	1.07	0.91	1.00	1.00	0.88	0.92	0.81
Type of Practice										
Solo	1.03	1.06	1.12	1.07	0.95	0.97	1.02	0.90	0.86	1.35
Non-solo	0.98	1.00	1.16	1.01	0.90	0.97	0.92	0.90	0.90	0.81
Location										
Nonmetropolitan	1.00	1.00	1.10	1.05	0.77	1.02	0.91	0.76	0.80	0.86
Metropolitan—										
Less than 1,000,000	0.99	1.02	1.14	1.03	0.90	0.95	0.87	0.90	0.85	0.82
1,000,000 and over	1.01	1.05	1.16	1.04	0.92	0.98	0.99	0.91	0.95	0.85
Employment Status										
Self-employed	1.01	1.03	1.13	1.05	0.92	0.95	0.90	0.90	0.88	0.84
Non-self-employed[c]	0.99	1.03	1.20	0.99	0.88	1.00	0.96	0.90	0.92	0.83
Employee	0.99	1.05	1.20	0.99	0.89	0.97	0.97	0.92	0.93	0.81
Independent contractor	0.96	0.95	1.18	1.00	0.87	1.17	0.91	0.84	0.91	0.88
Physician Age										
Less than 36 years	0.92	0.92	1.10	0.89	0.86	0.99	0.96	0.72	0.71	0.70
Less than 40 years	0.95	0.93	1.16	0.96	0.87	0.96	0.91	0.84	0.75	0.80
36-45 years	1.00	0.96	1.22	1.01	0.87	1.00	0.97	0.96	0.82	0.80
46-55 years	1.03	1.25	1.13	1.08	0.96	0.92	0.92	0.96	0.96	0.89
56-65 years	1.05	1.11	1.09	1.08	1.04	0.99	0.88	0.96	1.37	0.87
66 or more years	0.92	0.96	0.93	1.05	0.86	0.97	0.79	0.64	0.79	0.82

component has a much higher response rate and smaller variations among relevant subpopulations than the initial sample.

The initial sample response rate of 63.0% compares favorably with the Health Care Financing Administration's (HCFA) Physician Practice Cost and Income Survey of 1984-1985. The HCFA survey achieved an overall response rate of 68%, with a much longer field period and much larger budget. Of greater concern are the statistically significant variations in response rates in Table 1. These subpopulations represent the dimensions that were found to be historically the most troublesome in the program. The two areas of greatest concern are the variations by specialty and membership status. Lower response rates in internal medicine and surgery may reflect the "busyness" of physicians in

these fields and may introduce downward biases into estimates of hours worked, patient visits, and physician's incomes. Similarly, AMA membership status may be correlated with variables of interest. Efforts have been mounted to limit these variations in response rates. Nonetheless, significant differences remain; statistical techniques have been applied to the data to adjust the estimates.

Table 2 reports the mean values for the weights described above. The subpopulations reported in Table 2 correspond to the most detailed breakdowns reported in this volume. Within these cells, the average value for the weighting variable is highest for anesthesiologists between the ages 56-65. The lowest value for the weighting variable is for psychiatrists who are 66 or more years old.

The formula for a weighted mean $\overline{X}_W$ using the value of a weight variable w_i is:

$$\overline{X}_W = \frac{\Sigma_i w_i X_i}{n}$$

where X_i is the variable value for observation i, and n is the number of observations. It is assumed that the weights are normalized to sum to the number of observations.

The formula for a weighted standard error of the mean is:

$$\sigma \overline{X}_W = \sqrt{\frac{\Sigma_i w_i (X_i - \overline{X}_W)^2}{n(n-1)}}$$

Appendix C
SMS Questionnaire Summary

This summary contains questions from the 1991 Socioeconomic Monitoring System (SMS) survey. Since the questionnaires are quite lengthy, some questions have been omitted from the summary, while others have been paraphrased. However, parts of questions that are paraphrased have been enclosed with square brackets. All questions relating to the statistics appearing in the main body of this book are included in this summary.

Screener Questions (All Surveys)

1. Our records indicate that [Masterfile specialty] is the specialty from which you derive most of your medical income. Is that correct?[a]

   (IF "YES," GO TO QUESTION 2)

   a. What is your primary specialty?

2. During a typical week, do you provide direct patient care for 20 hours a week or more? Direct patient care includes seeing patients and performing surgery, as well as related patient services performed by anesthesiologists, radiologists, and pathologists.

3. Are you currently a full-time, salaried employee of a federal agency such as the U.S. Public Health Service, Veterans Administration, or a military service?

Practice Characteristics (1991 Core Survey)

4. Are you a full or part owner of your main practice, an employee of the practice, or an independent contractor?

5. Including yourself, how many physicians are in your main practice?

   a. How many of these physicians are full or part owners of the practice?

6. In what year did you begin medical practice after completing your undergraduate and graduate medical training?

7. In what year did you start working at your current main medical practice?

Hours and Utilization of Physician Services per Week (1991 Core Survey)

The next few questions are about the number of hours you spent working at several medical and administrative activities during your most recent complete week of practice. Do not include hours spent on call if you were not actually working.

All specialties except psychiatry, radiology, anesthesiology, and pathology

8. During your [last] complete week of practice, how many hours did you spend...

   a. In the office or in freestanding primary or urgent care centers seeing patients? (Include time spent in all offices if the practice includes multiple offices.)

   b. In the hospital emergency room and in outpatient clinics?

   c. In the operating, labor, or delivery room? Please include waiting time before surgery.

   d. Making hospital rounds, including visits to newborn infants? (Do not include hours spent on call if you were not actually working.)

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a. Masterfile specialty is information obtained from the AMA Physician Masterfile.

e. On house calls and with patients in nursing homes, convalescent homes, or other extended care facilities?

f. Having telephone conversations with patients or their families, consulting with other physicians, and providing other services to patients such as interpreting lab tests and x-rays?

g. In administrative activities connected with your practice and other medical facilities, as well as any other professional activities that did not involve patient care?

9. During the [number] of hours you spent in the office or in freestanding or urgent care centers [in your last complete week of practice]...

How many patient visits did you personally have? Please count as one visit every time you saw a patient.

10. During the [number] hours that you spent [in your last complete week of practice] in hospital emergency rooms and [outpatient clinics]...

How many patient visits did you personally have? Please count as one visit every time you saw a patient.

11. During the [number] hours that you spent seeing patients on house calls, in nursing homes, convalescent homes, and other extended care facilities...

How many patient visits did you personally have? Please count as one visit every time you saw a patient.

12. During the [number] hours spent in the operating, labor, or delivery room, how many operations and deliveries did you perform? Do not include assists.

13. How many assists did you perform during [your last complete week of practice]?

14. During [your last complete week of practice], how many inpatient visits did you make during the [number] hours spent on hospital rounds? Please count as one visit every time you saw a patient.

Fees for Selected Visits (1991 Core Survey)

All specialties except psychiatry, radiology, anesthesiology, and pathology

15. Does your practice provide at least some medical care on a fee-for-service basis?

(IF "NO," GO TO QUESTION 17)

16. What is your current usual fee for...

a. An office visit with a new patient including an evaluation history, examination, and/or treatment?

b. An office visit with an established patient including an examination, evaluation, and/or treatment for the same or new illness.

c. A follow-up medical visit in the hospital, when you charge a separate fee for hospital visits? This visit includes an examination, evaluation, and/or treatment with a new or established patient with the same illness.

Hospital Utilization (1991 Core Survey)

All specialties except radiology, anesthesiology, and pathology

17. During your most recent complete week of practice, how many patients did you personally discharge from the hospital?

18. Among those patients that you discharged in that week, what was [their average length of stay in days]?

19. How many of the [number] patients that you discharged from the hospital that week were Medicare patients?

1990 Income, Expenses, and Weeks Practiced (1991 Core Survey)

Self-employed physicians only

20. Do you share some expenses with other physicians?

21. [In 1990, what (were your/was your share of your practice's) total tax-deductible professional expenses for the following items to the nearest $1,000?][b]

a. Professional medical liability or malpractice insurance premiums.

b. First wording in parentheses is used for physicians in solo practice; second wording is used for physicians in non-solo practice.

b. Office expenses, including rent or mortgage for office space, utilities, and telephone.

c. Total nonphysician payroll expenses including fringe benefits.

d. Medical materials and supplies, such as drugs, x-ray films, and expenses for outside lab work, drugs, and other services.

e. Depreciation, leases, and rent on medical equipment. Do not include the total purchase price or the replacement value of your medical equipment. Please report only that proportion that was tax-deductible in 1990.

f. Other professional expenses, such as legal services, accounting services, office management services, professional association memberships, journals and continuing education, professional car upkeep and depreciation, and any other professional expenses [not mentioned].

All physicians

22. During 1990, how many weeks of medical practice did you miss because of...

a. illness or vacation?

b. military service or professional conferences?

c. Altogether then you missed [a + b] weeks of practice and practiced [52-a-b] weeks. Is that correct?

If physician started practice in 1990:

d. You mentioned earlier that you began practicing in 1990. Excluding the [number] weeks of practice you missed in 1990 because of illness or vacation, and the [number] weeks missed because of military service or professional conferences, for how many weeks did you practice in 1990?

23. During 1990, what was your own net income from medical practice to the nearest $1,000 after expenses but before taxes? Please include all income from fees, salaries, retainers, fringe benefits, and other forms of compensation.

24. Were any contributions made into pension, profit-sharing, or deferred compensation plans for you during 1990?

(If "YES," ASK PARTS a. AND b.)

a. How much was contributed for you to the nearest $1,000?

b. Did you include this amount in your [number] net income figure for 1990?

Professional Liability (1991 Core Survey)

25. Have any malpractice claims been filed against you during your career?

(IF "YES," CONTINUE WITH THIS SECTION)

26. How many malpractice claims have been filed against you during your career?

27. How many of these [number] claims were filed during the last five years?

(IF GREATER THAN 0, CONTINUE)

28. How many of these [number] claims were filed against you during the last twelve months?

29. What is the current annual limit on your total malpractice liability coverage? (Total annual limit would be equivalent to the limit on multiple occurrences.)

30. What is the current limit on your malpractice liability coverage per case? (the amount per case would be for a single occurrence.)

Medicare Access Questions

(1987-1991 Core Surveys)

31. During the last 12 months did you provide any services to patients whose principal source of payments was Medicare?

32. During your last complete week of practice, how many:

a. patient visits did you personally have during the hours you spent in the office or in free-standing primary or urgent care centers with Medicare patients?

b. patient visits did you personally have during the hours you spent in nursing homes, convalescent homes, and other extended care facilities?

c. operations and deliveries did you perform on Medicare patients during the hours you

spent in the operating, labor, or delivery room? Do not include assists?.

e. assists did you perform on Medicare patients?

f. inpatient visits did you make with Medicare patients during the hours you spent on hospital rounds?

(1990 and 1991 Core Surveys only)

33. At this time, does this practice accept all new patients who contact the practice, some new patients, no new patients, or patients only on referral?

34. At this time do you accept all new Medicare patients, some new Medicare patients, no new Medicare patients, or Medicare patients only through referrals? (Include referrals from other physicians in your answer).

Reimbursement from Third-Party Payors

35. What is your current usual fee for...

a. total hip replacement (CPT 27130).

b. an electrocardiogram including the fee for the use of the electrocardiograph, interpretation and report?

c. cataract extraction and lens insertion (CPT 66984)?

d. total hysterectomy with or without removal of tubes, and/or ovaries (CPT 58150)?

36. On average, what do private payors reimburse for a...

a. total hip replacement (CPT 27130).

b. an electrocardiogram including the fee for the use of the electrocardiograph, interpretation and report?

c. cataract extraction and lens insertion (CPT 66984)?

d. total hysterectomy with or without removal of tubes, and/or ovaries (CPT 58150)?

e. an office visit with an established patient that includes an examination and/or treatment for the same or new illness?

f. an office visit with a new patient that includes an evaluation history, examination and/or treatment?

g. a follow-up medical visit in the hospital when you charge a separate fee for hospital visits? This visit includes an examination, evaluation and/or treatment with a new or established patient with the same illness?

Appendix D
Definitions of Variables

This appendix describes definitions used in reporting information from the AMA Socioeconomic Monitoring System (SMS). Changes in methodology over time relating to trends reported in the detailed tabulations in *Socioeconomic Characteristics of Medical Practice* are also discussed. Data published in this edition and the 1987, 1988, 1989 and 1990/1991 editions are weighted (see Appendix B). Weighting the data causes the figures to differ from the unweighted information published previously in the 1983-1986 editions.

SMS survey questions referenced in this appendix may be found in Appendix C. Tables referred to are those contained in the detailed tabulations.

Sample Population

The population from which samples are drawn for SMS surveys includes all active nonfederal office-based and hospital-based physicians as defined by the AMA Physician Masterfile.[a] Residents are not included in the surveys.

Specialty

Specialty classifications used in reporting SMS data are shown in Table 1. Specialty is determined from responses to question 1 in SMS surveys.

Census Region and Division

States included in each census region and division are shown in Table 2. The state in which each physician was located is identified from the AMA Physician Masterfile.

Type of Practice

Physicians in solo and non-solo practices are distinguished in SMS surveys on the basis of responses to question 5. In the few cases where the number of physicians is not known, the practices are characterized as non-solo.

Location

The location classification groups physicians into nonmetropolitan areas, metropolitan areas with a population less than 1 million persons, and metropolitan areas with a population of 1 million or more persons. This classification was made on the basis of the demographic county classification contained on the AMA Physician Masterfile. Metropolitan areas include counties within Standard Metropolitan Statistical Areas (SMSAs) and counties outside SMSAs with populations over 50,000.

Employment Status

Employment status is determined from the response to question 4. Physicians who respond that they are full or part owners of their main medical practice are deemed to be self-employed, while the remainder are identified as either employee physicians or independent contractors. Physicians are initially coded as self-employed, employee, or independent contractor. Independent contractors were classified as employees for the purposes of the non-self-employed breakout reported here. The non-self-employed category is equivalent to the employee category reported in previous editions. Independent contractors and employee physicians are broken out separately for the first time in this edition. The few physicians for whom employment status was not available were classified as employees.

a. Classifications used in the AMA Physician Masterfile are defined in G. Roback, et al., *Physician Characteristics and Distribution in the U.S.*, 1991 edition, American Medical Association, 1991.

Table 1. **SMS Survey Specialty Classifications**

SMS Specialty Classification	AMA Physician Masterfile Specialties
General/Family Practice	
General/Family Practice	General Practice, Family Practice
Medical Specialties	
Internal Medicine	Allergy, Cardiovascular Diseases, Gastroenterology, Internal Medicine, Pulmonary Diseases
Pediatrics	Pediatrics, Pediatric Allergy, Pediatric Cardiology
Surgical Specialties	
Surgery	General Surgery, Neurosurgery, Ophthalmology, Orthopedic Surgery, Otolaryngology, Plastic Surgery, Colon and Rectal Surgery, Thoracic Surgery, Urology
Obstetrics/Gynecology	Obstetrics and Gynecology
Other Specialties	
Radiology	Radiology, Diagnostic Radiology, Therapeutic Radiology
Psychiatry	Psychiatry, Child Psychiatry
Anesthesiology	Anesthesiology
Pathology	Forensic Pathology, Pathology
Other	Aerospace Medicine, Neurology, Occupational Medicine, Physical Medicine and Rehabilitation, General Preventive Medicine, Public Health, Dermatology, Emergency Medicine, Other Specialty, Unspecified

Age

The age of each physician SMS surveys was determined from birthdate information on the AMA Physician Masterfile.

Weeks Practiced per Year (Tables 1 and 2)

Weeks practiced in 1990 was calculated with responses to questions 22a, 22b, and 22c. However, if the physician began practice in 1990, weeks practiced was calculated from responses to 22a, 22b, and 22d. By using this series of questions, a more accurate figure on weeks worked was obtained from physicians that began practice in 1990. Weeks practiced questions in 1987, 1988, and 1989 were the same as the 1990 questions.

Weeks practiced in 1986 was calculated with responses to questions 22a and 22b on the 1987 SMS core survey and verified with question 22c. Question 22c corrected an upward bias in the computational procedure for physicians in their first year of practice. Weeks practiced in 1985 was calculated with responses to questions 22a and 22b on the 1986 SMS core survey. Prior to the 1986 SMS core survey, the following question was asked:

How many weeks did you practice in 198_? Please do not include vacations, sick time, military service, or other similar absences from practice.

Weeks practiced in 1985 and 1986 was calculated as 52 minus the sum of the number of weeks entered in parts a and b of question 22.

Hours in Professional Activities per Week (Tables 3–4)

Professional activities includes all patient care activities, administrative activities connected with medical practice, and other professional activities that do not involve patient care, such as medical staff functions, teaching, and research. Hours per

Table 2. **Census Region and Division Definitions**

Census Region and Division	States
Northeast	
New England	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Middle Atlantic	New Jersey, New York, Pennsylvania
North Central	
East North Central	Illinois, Indiana, Michigan, Ohio,Wisconsin
West North Central	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
South	
South Atlantic	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia
East South Central	Alabama, Kentucky, Mississippi, Tennessee
West South Central	Arkansas, Louisiana, Oklahoma, Texas
West	
Mountain	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
Pacific	Alaska, California, Hawaii, Oregon, Washington

week in professional activities in 1991 is based on "total hours" as calculated by the sum of the responses to the individual parts of question 8 in the 1991 SMS core survey. Follow-up probes detailing the scope of the individual parts of these questions were used to avoid double counting of hours.

Hours in Patient Care Activities per Week (Tables 5–6)

Patient care activities include direct patient care and activities related to patient care, such as interpreting laboratory tests and x-rays and consulting with other physicians. Hours per week in patient care activities from 1984 to 1991 is based on the sum of the responses to parts a-f of question 8 in the SMS core surveys.

Hours in Direct Patient Care Activities per Week (Tables 7–8)

Direct patient care activities include seeing patients in the office, on hospital rounds, in surgery, and in other settings. Hours per week in direct patient care activities for 1984 to 1991 was determined from the sum of responses to parts a-e of question 8 on the 1984 through 1991 SMS core surveys. Physicians in psychiatry, radiology, anesthesiology, and pathology are not reflected in computations of direct patient care hours in Tables 9, 10, and 11.

Office Hours and Hours on Hospital Rounds per Week (Tables 9–12)

Office hours and hours on hospital rounds per week from 1984 to 1991 are based on responses to questions 8a and 8d respectively in the SMS core surveys. Physicians in psychiatry, radiology, anesthesiology, and pathology were not asked questions 8a and 8d and are, therefore, not reflected in the data reported in Tables 9–12.

Hours in Surgery per Week (Tables 13–14)

Hours in surgery per week in 1991 is based on responses to question 8c in the 1991 SMS core survey. Physicians in psychiatry, radiology, anesthesiology, and pathology were not asked question

8c and are, therefore, not reflected in the data reported in Tables 13–14. Hours in surgery per week prior to 1991 in Table 14 are based on responses to a similar question on the earlier SMS core surveys.

Total Patient Visits per Week (Tables 15–16)

Total patient visits includes visits in the office, on hospital rounds, in hospital emergency rooms and outpatient clinics, and in all other settings. Total patient visits per week in 1991 is based on the sum of responses to questions 9–14 on the 1991 SMS core survey. Total patient visits per week in 1986–1990 was derived from similar questions on the 1986–1990 SMS core surveys. Total patient visits per week from 1984 and 1985 is based on responses to the following question:

During [your last complete week of practice], how many...

a. Patients did you personally see in the office, including outpatient surgery performed in the office?

b. Operations, deliveries, and assists did you perform in the hospital?

c. Inpatient visits did you make on hospital rounds? Please count as one visit every time you saw a patient.

d. Patients did you see in the emergency room and in outpatient clinics?

e. Patients did you see on house calls or in nursing homes, convalescent homes, or extended care facilities?

Physicians in psychiatry, radiology, anesthesiology, and pathology were not asked either series of questions and are, therefore, not reflected in the data for 1984 to 1991 in Tables 15–16.

Office Visits and Visits on Hospital Rounds per Week (Tables 17–20)

Office visits and visits on hospital rounds per week in 1991 are based on responses to questions 9 and 14 respectively in the 1991 SMS core survey. Office visits and visits on hospital rounds per week for 1986–1990 were obtained from similar questions on the 1986–1990 SMS core surveys. Office visits and visits on hospital rounds per week in the years 1984 and 1985 were based on responses to the question:

During [your last complete week of practice], how many...

a. Patients did you personally see in the office, including outpatient surgery performed in the office?

b. Inpatient visits did you make on hospital rounds? Please count as one visit every time you saw a patient.

Physicians in psychiatry, radiology, anesthesiology, and pathology were not asked either set of questions and are, therefore, not reflected in the data in Tables 17–20.

Surgical Procedures per Week (Tables 21–22)

Surgical procedures per week in 1991 is based on responses to questions 12 and 13 in the 1991 SMS core survey. The identical questions were used on the 1986–1990 SMS core surveys to obtain surgical procedures per week in 1986, 1987, 1988, 1989 and 1990. Surgical procedures per week in 1984 and 1985 were based on responses to the question: "During [your last complete week of practice], how many operations, deliveries, and assists did you perform in the hospital?" Physicians in psychiatry, radiology, anesthesiology, and pathology were not asked either set of questions and are, therefore, not reflected in the data reported in Table 21–22.

Hospital Utilization (Tables 23–26)

Data on patients discharged from the hospital per week and the length of stay of patients discharged in the years 1984 to 1991 are based on responses to questions 17 and 18 on the respective SMS core surveys. Physicians in radiology, anesthesiology, and pathology were not asked questions 17 and 18 and are, therefore, not reflected in the data in Tables 23–26.

Fees (Tables 27–32)

Fees for office visits with new patients, office visits with established patients, and follow-up hospital visits between 1984 and 1991 were obtained in the SMS core surveys from responses to questions 16a, 16b, and 16c respectively. Physicians in psychiatry, radiology, anesthesiology, and pathology were not asked question 16 and are, therefore, not reflected in the data in Tables 27–32. In the 1983 and 1984 editions, the fee reported by each physician was weighted by the frequency with which the physi-

cian had each type of visit in computing average fees. This weighted average method was not used in the 1985, 1986, 1987, 1988, 1989, 1990/1991, or 1992 editions. In 1985 and 1986, the mean physician fee was computed as the simple average of responses. In the 1987, 1988, 1989, 1990/1991, and 1992 editions, the mean physician fee was computed as a simple average of responses weighted for survey nonresponse (see Appendix B). The mean fees reported for all years in Tables 28, 30, and 32 have also been computed in the latter fashion so as to provide consistency among the information reported.

Professional Expenses (Tables 33–46)

Professional expense information reported in Tables 33–46 refers to tax-deductible professional expenses from medical practice. Data on total professional expenses for 1990 are obtained either as the sum of the responses to parts a-e of question 21 in the 1991 SMS core survey or, in the event any of these responses is missing, as the response to the question, "In 1990, what were your total tax-deductible professional expenses from medical practice to the nearest $1,000? Do not include contributions made for you into deferred compensation plans." Data on professional expenses for 1982 to 1990 in Tables 34, 36, 38, 40, 42, 44 and 46 are based on responses to similar questions from the 1983 to 1990 SMS core surveys. The 1987 SMS survey, however, also asked a separate question on 1986 physician payroll expenses. This question was not asked on any other surveys. On other surveys, physician payroll expenses are included in the "Other Expenses" category. Data relating to professional expenses from the SMS surveys are based only on self-employed physicians.

Net Income after Expenses before Taxes (Tables 47–54)

Physician net income is defined to include all earnings from medical practice after expenses but before taxes, including fringe benefits and contributions made into deferred compensation plans. Net income in 1990 was determined in the 1991 SMS core survey from responses to question 23.

In addition, question 24 was included as a probe to ensure that deferred compensation plan contributions were fully represented in net income. If the physician responded "no" to question 24b, the response given to question 24a was added to the response to question 24 to obtain net income. Similar questions in the 1984 to 1990 SMS core surveys were used to obtain information on net income for 1983 to 1989, respectively.

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